Canadian Journal OF Mental Hygiene

VOL. III MONTREAL, JULY, 1921 NO. 2

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PUBLISHED QUARTERLY BY

The Canadian National Committee for Mental Hygiene

PUBLICATION OFFICE: MONTREAL, Que.

EDITORIAL OFFICE: 207 ST. CATHERINE ST. W., MONTREAL, QUE.

Two Dollars a Year *Fifty Cents a Copy*

CANADIAN JOURNAL
OF
MENTAL HYGIENE

VOL. 3 MONTREAL, JULY, 1921 No. 2

PSYCHIC EPIDEMICS

BY HORST OERTEL

THE physician, in order to diagnose and prognose a disease in a patient properly, finds it necessary to obtain full knowledge of the whole personal and family history. Thus also, the medical historian approaches and studies diseases as generic phenomena and expressions from which he endeavours to formulate general laws which govern human existence. For the historian, whether his pursuits are medical, political or moral, is confronted by human life as aggregate. He may even go beyond it and treat the human phase only as a part of a general living being. His duty is to determine what is common to all life, to what extent its forms differ and how its parts move in, and are related to, their environment. For one of the greatest questions is, whether all organic life and again each unit of life represent only aggregates of individuals, or, whether they are entities in the same sense that the individual himself is an entity, not a simple summation of cells. Here each component must follow certain laws which are dictated by the unit as a whole. This is of fundamental importance in the interpretations of human history, no matter from which standpoint we view it. Does the human collective unit move of necessity according to certain laws, are its actions determined? Should we, as the great medical historian, Hecker, early in the nineteenth century put it, "be able to deduce from the grave facts of history a convincing proof that the human race, amidst the creation which surrounds it, moves in body and soul as an individual whole?" Is the individuality of persons and nations which we value so highly, only a ripple on the vast ocean of mankind, whose movements bring forth the ripple, but in their own massiveness and force remain hidden underneath, unnoticed by the casual observer, until a violent outbreak through a gale discloses their presence and power to a surprised spectator?

It is in this connection that medical history may demand general recognition, for it discloses plainer than any other branch of history two closely related common human characteristics—susceptibility and cohesion. It is especially the history of epidemics, their origin, their

commencement, extent, manner of propagation, periodic occurrence, geographical distribution, racial influence, although still obscure in many points, that directs our attention towards certain laws which govern susceptibility, and therefore, cohesion of the human aggregate. Most instructive are those epidemics which are psychic, in which no physical, material contagion exists, but which are communicated by, and disturb the mind purely through the senses. Of these there have been outbreaks in different parts of the world in one form or another and at one time or another. The ground for their development is always prepared by great exhausting upheavals (famine, war, plagues, etc.) which unbalance the human mentality, paralyse restraint, judgment and throw, therefore, the savage animal, imitating nature and common instincts of man into most extraordinary relief.

These psychic epidemics depend all upon a morbid enthusiasm of one thing or another, often augmented by hatred, leagued with baser passions, but frequently cloaked in, and supported by, a mantle of virtue. Their desire is to satiate long suppressed emotions, jealousy, revenge and sensuous pleasures which are ordinarily suppressed by conventions.

Furthermore, these mental states have generally been taken advantage of by the unscrupulous who, in order to gain their own ends and profits, join, encourage and propagate the particular expression of a deranged mentality.

Thus whole cities, districts and countries have succumbed to strange mental attitudes and actions.

Of these psychic epidemics many exist, but hardly any is more interesting and instructive than the so-called "Dancing Mania" which, in changing but essentially similar form, occurring in greater or lesser extent in all countries of the old and new world, has been in evidence from the middle ages to the present generation and has appeared under, and consequent to, similar environmental influences.

The facts and evidence of this epidemic were carefully collected, critically reviewed and masterly presented by Hecker in his great work on the Epidemics of the middle ages, which appeared from 1832 to 1834, and which includes an account of the "Black Death," "The Dancing Mania" and "The sweating sickness." At the instigation of the council of the Sydenham Society, appreciating the importance of the work, an excellent English translation by Babington appeared in their publications in 1844, with annotations and references to originals, making the work available to English readers. Creating a great impression at the time in its historic and psychological bearings, it was gradually more or less lost sight of, even by the medical profession and historians for whom it had been principally written. Thus, at the present day, much of its historic and psychological value and influence has been obliterated.

I have, therefore, thought it opportune to place once more the chief facts and relations of one of the most peculiar human afflictions before a larger circle of readers.

It is necessary to first sketch briefly the background and settings of the malady, for, like all human movements, it becomes intelligible only in the light of the preceding events.

The Dancing Mania appeared in extraordinary form and extent during one of those frightful periods of physical and mental depression which were unusually numerous in the middle ages. It followed closely in the path of the plague and the turmoils of a general disorder. Their moral effects were even more shocking than their physical devastation. Thus there died of plague[1]: in London, between 20,000 and 30,000; a tremendous rate for the population of that time. The daily interments rose to 200 a day in one cemetery alone. (The old Charter house churchyard in London has a stone monument at its entrance bearing the inscription that 50,000 corpses were here interred. But this is undoubtedly based on a traditional exaggeration and was recorded about 22 years after the epidemic.) In Yarmouth there were about 7,000 deaths; in Leicester 1,377 of a population of 3,939; in Norwich, 15,000. (The record of 50,000 given by some for Norwich seems altogether impossible.) Oxford lost two-thirds of its academic population.

Significant are the, generally reliable, figures for the monasteries and clergy. Thus Higden, in "Polychronicon," states: "in some houses of religion, of twenty, were left but twain." In Croxton all monks died with exception of the abbott and prior. In Ely 28 out of 43. In the Archdeaconry of West Riding there were 96 vacancies in the year 1349, leaving 45 parishes in which incumbents survived. In East Riding 60 incumbents died out of 95 parishes. In East Anglia 800 parishes lost their parsons from March 1349 to March 1350; 80 parishes having been twice vacant and 10 three times. In the mountainous parts the ravages seemed to be less, but the Scots contracted and imported the disease into their country through one of their many invasions into English territory. In Ireland the epidemic appeared equally severe, although according to some it seems to have been somewhat less infected than the rest of Britain. But on the continent conditions were even more terrible. In Paris fully 50% of the population died and the daily death rate rose to 800; in Vienna the daily death rate is given as between 500 and 1,000; in Florence there died of plague 60,000; in Naples, 60,000; in Genoa, 40,000; in Avignon, 60,000; in Modena the whole population of one hundred succumbed; in Rome the dead were reported "countless"; in Strasburg, 16,000; in Lubeck (at that time an important part) 9,000. Cairo is reported on good authority to have lost at least 1,000 people a day; in Asia succumbed, according to a report to Pope Clement

1- The older figures of the mortality during the plague epidemic were much larger, but not very reliable. The figures here recorded are from the more critical recent works of Creighton (Epidemics in Britain, 1891, I), Haser (Geschichte d. Medizin, 1884) and Lersch (Volkssenchen, 1896) where other details may be found.

VI, 23 millions. India was depopulated. Even the inhabitants of the most northern countries, Greenland and Iceland did not escape. To them it was brought from Denmark, Sweden and Norway. In Germany, which was apparently more spared by the plagues than other countries, only (!) 1,244,434 died. In the city of Erfurt, after the cemeteries had been filled, corpses were thrown by the thousands into tremendous pits. The same practice was followed in other cities, or bodies were thrown into the rivers. Hecker states that, without exaggeration, the number of deaths in Europe was about 25,000,000. It is safe to assume that Europe lost near to one-half of its entire population.

When towns were stricken by the disease, panic followed; fear, consternation ruled; all order broke down. Citizens committed suicide in order to escape the disease. Morals deteriorated, laws disappeared and strife and conquest added to the existing disorder. This, shortly, is the picture of the "Great Mortality" from 1347 to 1350, but not ended in that year, for recurrences were frequent to the end of the 14th century which, although not so severe or general, but in combination with other misfortunes, perpetuated the demoralization.

It is interesting to recall in this connection two important associated phenomena which have profoundly influenced subsequent history:— One is the increasing wealth and power of the church through the acquisition of donations in treasures and land. Individuals in fear of death gave freely for penance and protection. The other is a most extraordinary fecundity of the women. Marriages became prolific so that the waste of human life was more rapidly replaced than the psychic effects of ruinous influences were worn out.

The first spreading psychic results of these unhappy times are evident in the extending movements of the Flaggelants or Cross bearers. Flaggelation, as religious penance, had been practised long before and been witnessed in various parts of Europe, but with the plague it rose to much greater importance and exaggeration.

From Hungary, in 1349, there marched a few hundred Flaggelants in strange ecclesiastic procession across Germany. By the time they reached Strassburg their number was over a thousand; at Speyer it became a general movement in which the whole city participated. It gained greater momentum with wider distribution. Degenerate practices, crimes and other outgrowths were associated with Flaggelant exhibitions and influences, outlaws and adventurers joined them, until the Sorbonne at Paris and the Emperor Charles both appealed to the Holy See against them, and indeed the Flaggelant movement threatened the authority of priests and church.

But now the heated, unbalanced public mind turned to another outlet of its emotions in a direction which since the time of Tucydides

has been for ever in the minds of the ignorant and vulgar, the explanation of great catastrophes.

The belief spread over Europe that the plague was due to poisoned water, poisoned food and supplies and poisoned air. A common enemy of Europeans must, therefore, by the perpetrator. Who could that be other than the Jew? Thus in September and October of 1348 began at Chillon, Lake Geneva, the persecution and massacre of the Jews. With and without torture confessions were obtained. Public meetings were held to devise means how to exterminate the Jews and thus they were either burnt or forced out by sword, their money and property confiscated and stolen. In Strassburg two thousand Jews were burnt alive in their own cemetery, in Mayence 12,000 are said to have been executed; there and elsewhere the simultaneous entry of the Flaggelants gave rise to greater slaughter. Humanity and restraint by Pope and Emperor were insufficient to stem the tide, although notables and secular and ecclesiastic powers finally took the Jews under their own protection. The Jews remained in public opinion poison mixers, conspirators through an apparent overwhelming evidence. A most important historic document in this respect is the communication of the Castellan of Chillon to the Mayor of the City of Strassburg, 1348, enclosing copy of the inquisition and confession of several Jews, which gave an appearance of justice to these executions. For example, Balaviguns, a Jewish physician, after having been put on the rack, confessed that about ten weeks before the Rabbi Jacob of Toledo sent him by a Jewish boy some poison in the mummy (shell) of an egg in form of a powder sewed in a thin leathern pouch, commanding him in an accompanying letter, on penalty of excommunication, to throw the poison into the larger and more frequented wells of Thonon. This he did. The same boy, he stated, brought similar messages to other Jews whom he mentioned by name and residence. He described the color of the poison as red and black. He believed this poison to contain a portion of the basilisk, because he had heard and felt assured that the above poison could not be prepared without it. Nine similar confessions, generally obtained after, at least short torture, are appended. Even Christians were suspected, arrested, quartered, flayed and hanged.

All respect for truth, law and order, secular or divine, had perished. No one would attend to his duties. Responsibility vanished. Violent fear of either disease or murderers or burglars controlled thought and action. Even after the "large mortality" had subsided in severity, recurrences, combined with continued warfare and pillaging and associated with natural disasters (famine, inundations, earthquakes, storms) prevented a rapid return to the normal and preserved terrible traditions in the public mind.

Into this period of physical and mental exhaustion falls the great epidemic of "Dancing Mania."

The malady appeared first in those districts in which wretchedness and want were most severely felt. Men, women and children were debilitated, bowels and other abdominal organs out of order from hunger and bad food.

It was in July, 1374, that the inhabitants of Aix-la-Chapelle were witnesses of the following spectacle: there appeared in streets and public places men and women, their heads adorned with wreaths, who formed circles, hand in hand, and without regard to anything else or any bystanders, danced in wild delirium for hours until they fell exhausted to the ground. They then groaned and suffered from abdominal pains and tympanites. This was relieved by swathing. Clothes were tightly bound round their waists, or bystanders simply jumped and trampled upon their abdomen. Delusions frequently followed and these generally took a religious character. Convulsions also occurred. From Aix-la-Chapelle the disease spread over the Netherlands and Belgium in various modifications, being reported from Liege, Utrecht, Tongres and other towns. But not only the participants were affected, but gradually the whole population through the attention that was paid to the dancers. Peculiar idiosyncrasies were shown. Dancers exhibited a morbid dislike to pointed shoes, red colours and weeping persons. An ordinance, therefore, was issued forbidding the making of any but square-toed shoes. A few months later the disease broke out in Cologne and about 500 persons took part in it in Cologne, 1,100 in Metz. It extended from a dancing mania to other wild enjoyments. Beggars, adventurers, vagabonds joined and exploited the movement for their livelihood and helped to spread the disease, unmarried women used it to satisfy their sexual desires. The disease gradually extended. In 1418 it appeared in Strassburg in magnified and extended proportions accompanied by musicians playing bagpipes; then slowly crept to Switzerland. Report has it that in Basle one woman kept on dancing for a month. Thus it went on, appearing here and there, sometimes abating, sometimes increasing in fury. In some instances persons danced themselves to the very last breath or dashed their brains against walls or rushed into rivers, all of them raving and fuming. A sudden shock, however, like falling over benches or chairs would often stop the paroxysm; thus some were cured or, after a rest, start anew or had periodic recurrences.

This epidemic, as it occurred from 1374 on, was not an entirely new phenomenon, but had been preceded by similar, if not so widely disseminated occurrences. They were all more or less related to religious fanaticism of one kind or another and religious superstitions. But the great epidemic of 1374 seems to have been precipitated by curious

heathenish customs, which in many Christian countries were preserved and transferred, after introduction of Chrisitan religion and holidays, to St. John's day. Bones, horns, other articles of refuse were heaped together in a great conflagration, while persons danced around it, carried the flame in circuit or even sprang through the fire. The secrecy with which these feasts were conducted in spite of priestly interdiction lent a particular excitement and flavor to them and these emotions were probably accentuated during the period of the plague. Thus also in the first appearance in Aix-la-Chapelle the name of St. John appears to have been referred to by the dancers. Hecker believes therefore, that the Festival of St. John, in 1374, brought to a crisis a long prepared psychic state, while cure for it was sought in appeals to St. Vitus who had acquired a great reputation as a helper or apothecary to the physically afflicted.

Similar customs to those practised in connection with St. John's holiday were retained by most nations of Europe and Asia and it is interesting that the dancing malady even made its appearance in the Christian part of Abyssinia where John was worshipped as its saint.

All countries have suffered more or less from similar strange dancing disorders. In Italy it assumed alarming proportions in the so-called Tarantism. This made its appearance first in Apulia and then spread over the whole of Italy, remaining epidemic for centuries. The first account of it has been given by Perotti (1430 to 1480). It was universally put down as caused by a particular spider and, although superstition with regard to its effects had existed long ago, it was again the physical and mental exhaustion by plague, erysipelas, leprosy, small pox, etc., which prepared the ground for a general sympathetic epidemic, through a morbid sensitiveness of the human mind. A general conviction spread that music and dancing distributed the poison through the body and expelled it through the skin. But if any poison remained, music would bring on renewed paroxysms. Thus regular feasts of Tarantula were established, the performances and crazy customs of which have been accurately described by an eye witness, Matthioli. All sorts of people and nationalities were affected by it, including Spaniards, Albanians, Gypsies, Negroes, and even deaf people, who could not hear the music, were, by sheer imitation of sight, infected. It continued to the Seventeenth century and then gradually declined.

In Abyssinia also there occurs in the Tigre country a disease called Tigretier. It consists of convulsive body movements, especially in women, which are excited by musical instruments—trumpets—followed by a wild dance, the performers being delighted while the music lasts, discontent when it ceases. It is generally preceded by a period of lingering body decline, poor nutrition and a stuttering speech. Catalepsy

may follow.

As very closely related to the Dancing Mania stand those common, fanatic public outbreaks which have persisted to the present generation. Generally of religious origin, they are sometimes based on other motives and made possible by a combination of strong abnormal environmental influences which upset the balanced mental equilibrium and allow rule of exaggerated emotions.

Only one or two shall here be mentioned on account of their general importance and interest. In 1727 there died in Deacon Paris an opposer of the Ultramontanists, after considerable discussion and division on the papal bull "Unigenitus." In September, 1731, a rumor spread that miracles occurred at his tomb. Individuals visiting it were seized with spasms and convulsions, acted like persons possessed and showed disturbed body and mental activities. An immense crowd from Paris went out to see this wonderful spectacle, which the two divided camps of ultramontanists and their opposers ascribed, the first, to Satanic, the second, to Divine influences. It gave rise in women to the first cases of "clairvoyance," which until then had not been known. One blindfolded woman attracted especial attention by being able to read writings before her and to distinguish the characters of unknown persons. The earth from the grave was supposed to exercise miraculous powers and was distributed among the sick. From that day dates the following couplet:

"De par le Roi, defense a Dieu
De Fair miracle dans ce lieu."

It was prompted by an order of Louis XV. to close the cemetery.

The actions of the afflicted were most peculiar: Patients would bound from the ground like fish, and women and girls, anticipating these movements in fear of infection put on special gowns, made like sacks, in order to prevent indecent exposures. Bystanders would beat them with wooden clubs, mallets, stones, swords, but generally without much effect, thousands of blows being sometimes inflicted without effect on a person.

Eventually the disease degenerated further into true insanity and idiocy. It lasted to the year 1790, and, like other spreading psychic epidemics, led to immoral practices and bewildering devotional exercises. Even during the excitements of the revolution it persisted in secret meetings.

Equally remarkable are the exhibitions of certain English and American psychic disturbances which may be noted to the present day. The sect of the Jumpers, founded in 1760, in the county of Cornwall, by two fanatics, collected a considerable party. By use of meaningless words they worked themselves into a state of frenzy and lost control of all reasoning. They then jumped with queer gestures until exhausted

and, beginning with a few, there resulted by visual infection wild orgies of whole assemblages.

Another, well known, example of psychic-infection is that of a Chapel at Redruth in which, during divine service, a man suddenly cried out "What shall I do to be saved?" He was followed by others, apparently in much bodily pain. Soon hundreds of people were thrown into the same state and the queer disorder advanced to the towns of Cambourne, Helston, Truro, Penryn and Falmouth. In every instance it was excited by these words, was associated with bodily pains, terrible convulsions and distortions and the afflicted cried out that they saw hell open to receive them. According to a moderate computation 4,000 people were, within a short time, affected by this complaint. A convulsive epidemic disease passing into catalepsy developing during public worship and public amusements has been recognized in the Shetland Islands for one hundred years. Cold water speedily relieves the spasms.

In the United States, camp meetings, their consequences and exploitations by adventurers are notorious and were especially in vogue during the middle of the last century. The descriptions of Huckleberry Finn and the advantage which one of the two imposters in the story took of the mental state of the attending crowd are not poetic exaggerations, but borne out by ample truthful evidence. The spreading disorder of the mind is here quite similar to that of all other psychic epidemics. Children especially are apt to suffer lasting harm and often retain weakened or perverse nervous systems through life.

One could multiply these and similar instances in all human communities to the present day.

But there exist other types of psychic epidemics which do not depend upon severe motor and sensory impressions and which, on account of a greater difficulty in fixing their physical expressions, are not so easily classified and recognized. I refer to epidemics of abnormal. exaggerated and fantastic, often absurd ideas merely through suggestion,

They also appear most prominent in times of, or following, great mental excitement, deprivations of all kinds, war, famine, fear and social disorder. They are most always objectivated upon something concrete, sometimes persons, sometimes non-living things. Adoration, love, admiration for, or fear, hatred, despite against them, are expressed. The importance and influence of such concrete objects is morbidly exaggerated; they are either brought into causative relation to all bodily ills and misfortunes from which a time suffers and a public hatred for their annihilation or destruction is cultivated; or, they are held to be the only salvation of a deteriorating world for realization of ideals which are proclaimed by meaningless catch words or phrases.[2] All critique, mental and moral restraint are lost and the public mind then resembles

2 In Goethe's words:—
"Denn eben wo Begriffe fehlen,"
"Da stellt ein Wort Zur rechten zeit sich ein."

that of the Roman Emperors during the period of Caesarean Insanity. Gross egotism rules; sympathy, feeling and tolerance of individual to individual give way to a general condemnatory and even hateful attitude to any one whose mentality shows better balance and restraint and respect for the opinion and feeling of others.

Blindly the mind collapses in morbid enthusiasm before an imaginary creation.

The history of the world is full of examples which demonstrate that the public mind is carried, especially in periods of excitement, entirely by suggestive force of sensual impressions and that enthusiastic infatuations spread by processes of sympathy with ever-increasing facility. In normal times when a more or less stable environment surrounds the people, these forces remain dormant in the mind, but during periods of stress, fear, jealousy, exhaustion, hunger, social unrest, etc., they lead to motor actions and are responsible for those strange and degrading acts of social abuses, which are found in a long series of irresponsible human performances, from senseless, inflaming oratory and absurd legislation to massacres and wild maniacal contortions, even self-destruction.

Their motive is removal or annihilation of the cause of the excitement and emotions and they relieve the accumulated tension and energy of the carriers through motor explosions.

And as the mental and moral eyes are blind to reason, reflection, restraint, so they are blind to self-criticism and the craziest and most disgusting selfish acts are executed under the benevolent cloak of public service, moral uplift and high ideals in a self-deceit and hypocrisy which, in their mass action, outstrip the cruel and demoralizing activities of the early Roman Emperors.

One word in conclusion: In the preface to the English translation of Hecker's monograph on the Plague, Babington, in emphasizing the importance of historic knowledge, expresses the belief that thousands of lives of persecuted Jews and Christians might have been spared, 'if at the time of the Plague it had been commonly known that the fairy tale of poisoning by a national enemy has recurred since the time of Tucydedes during all great catastrophes. A noble sentiment But—what a pity that it is not generally borne out by history itself. For history teaches that a keen understanding of the defects and weaknesses in another person and of another age is no safeguard or shield against the power of emotions which governs our own.

A STUDY OF 5,600 CASES PASSING THROUGH THE PSYCHIATRIC CLINIC OF THE TORONTO GENERAL HOSPITAL. A SPECIAL STUDY OF 188 CLINIC CASES—ALSO A SURVEY OF 767 CASES OF ILLEGITIMACY

BY C. K. CLARKE, M.D.

AS a rule many of those who become enthusaistic about social service matters find themselves dealing with generalities unsupported by facts, and frequently arrive at conclusions not justified by experience.

In the past we have had to draw on other countries for many of the figures on which to base theories, but since the advent of the Canadian National Committee for Mental Hygiene, advantage has been taken of the facilities offered by the Toronto General Hospital Psychiatric Clinic and its Social Service Department to collect accurate statistics.

Theoretically the statistics from the United States should parallel those of Canada, but a careful study of conditions and populations shows marked differences, as immigration has played such an important part in some Provinces, while it has not been a factor in others. Since the Psychiatric Clinic was established a few years ago something over six thousand cases have been investigated. Information in regard to all is not available, but fifty six hundred have been carefully classified. Of the 5600, 3274 were males and 2326 females. They came from different sources such as the Juvenile Court, Schools, Public Health Department, Societies of various kinds, Social Agencies, etc., but before the establishment of a psychiatric department in connection with the Juvenile Court the great majority were, so called, delinquents.

What does a careful study of these figures reveal? Surely the first thought to strike the careful student is the fact that prevention has not received the consideration it deserved.

PROSTITUTION

To begin with prostitution. Unfortunately the figures only tell a part of the story, as the male offender has not been studied and classified, for obvious reasons. In the first place what were these prostitutes?

A great majority of them were of school age when first becoming immoral, and were defective—some were insane. At all events, under a proper system of school inspection their defects could have been detected,and an intelligent line of care and treatment mapped out. What suffering

and vice would have been obviated by a rational direction of the indivdual at a period when treatment was possible! Unfortunately much of our social service begins at the wrong moment and aims only at cure after the damage is done. Prevention should be the slogan of all social service workers.

When describing these girls as defective, possibly this point should be clearly stated. Ordinarily the term mental defective is applied to those who measure low in the scale of intelligence, and do not reach a mental age of twelve, although their chronological age is much greater.

Under this heading may be grouped the majority of the prostitutes examined, although others showed their defect more particularly in want of ability to realize their social obligations, and exhibited defects in character that were sufficiently clear to the investigators.

Take the girls, for example, who could do the Binet Simon tests up to twelve or thirteen, but whose failure even under advantageous circumstances, to recognize the most obvious moral obligations, clearly showed the defect in their organizations. The class called High Grade Morons are the most amiable and difficult form of all the defectives to manage, and possibly the greatest menace to the community, as they are so often attractive in appearance, and plausible, to the ordinary observer. The sentimentalist always objects to any methods devised to control these weaklings, the experienced social worker knows that until such individuals are placed under constant supervision they will provide an endless chain of vice and criminality and will form the distributing centres of venereal disease. A perusal of clinic histories makes this plain.

Here are a few typical histories taken almost at random and without attempt to specialize on spectacular cases. They might be described as "run of mine" types.

CASE I

Jennie J. Age 19. Scotch. Single. Left school when between 15 and 16, but failed to pass the entrance. Jennie is attractive in appearance, of pleasing manner, but does not show the faintest evidences of possessing a sense of moral responsibility. To the ordinary observer nothing unusual would be noticeable; the trained investigator would soon discover her defects, mental and moral, and the Binet-Simon tests showed that her mental age was less than twelve.

She first worked in a biscuit factory, where she found the girls of pretty loose type, and at once commenced a life of immorality and prostitution. Like many of her class she earned small wages, did the simplest kind of work, and went from factory to factory with persistent regularity.

She was in a knitting mill, a doll factory, a pickle factory, in a

laundry, and many other places.

Was arrested for stealing and " sent down" for ninety days. While on the farm says she learned more of immorality than she ever knew before and it is evident from her statements and language that there was little about vice she did not pick up . Says she went with great regularity to all the dance halls, which, she states, are dens of iniquity. Thinks what she learned in dance halls was even worse than what she acquired at the Farm.

Is a typical high grade moron. Has had syphilis for a year and a half.

During her whole conversation was chewing gum, and did not show the slightest hesitation in telling her story. This girl's good looks make it difficult to save her from herself, and society from her evil influence as a distributor of venereal disease.

CASE 2

Maria P., 18, Can. Reached the Jr. III at school. Has been employed at many factories, etc., but never remained for any length of time in any one position. Became immoral at an early age, generally selecting foreigners, such as Greeks, Chinese, etc. as her companions, and lived a life of prostitution. Ran away from home from time to time going to such American cities as Rochester, Syracuse, etc. Her word is not to be depended on and her relatives are never certain of the truthfulness of any statement she makes. Has became careless about her dress.

Acquired syphilis in due course, and also became pregnant. Without knowing anything about a man she picked up , married him at a moment's notice. This man was not the father of the coming child, and is a notorious criminal.

The girl has some appearance of mental brightness, but a brief examination shows that her knowledge of even every day affairs is superficial. Could not tell the name of the Lake at Toronto, although she has lived here all her life. Thought Toronto had 30,000 inhabitants. Did not know the name of the Premier of the Federal Government, in fact never heard of such a position. Said she would like to have the opportunity to shoot her husband, nothing would give her greater pleasure.

Just why she had this feeling, she could not state.

This girl's mental age is nine, and she is, of course, a menace to the whole community.

CASE 3

Alice W. Age 20. Eng. Delicate until 10. Was so slow at school that she had only reached the Sr. 2nd at 14.

Her industrial career has been a varied one and she has been in many factories, packing chocolates, biscuits, etc. Gives a record of six factories in about the same number of months. Says she was always fired because she was so slow.

Had sexual relations regularly with her father when she was eleven, and afterward continued her immoral career with others.

Has little knowledge of things in general. Does not know the number of days in a year. Says an island is a body of water surrounded by land.

Laughed and giggled a great deal during the examination and enjoyed the experience.

Her mental age is less than nine.

CASE 4

Peggy Q. Age 22. Irish. Has been in Canada 15 years.

Three years in High School where she took a commercial course.

Her occupations have been varied,and she has at different times been a telephone operator, clerk in a factory, waitress in hotels etc., her good looks and bright manner enabling her to obtain employment easily. Claims that she married when nineteen and lived with her husband but a few weeks. Became a mother but the baby died from some mysterious trouble, probably syphilis. During her brief married experience she met a "sporty gentleman" with whom she was frequently immoral, often spending week ends with him at hotels in different parts of Canada. Became pregnant in due course and when the baby was born it was found that both she and the child had syphilis. Her immoralities have been many, and while it is true that she can pass the intelligence (Binet Simon) tests up to twelve years, her defects in other directions are obvious. She frankly says she was simply "out for a good time" and had it. She has no feeling of shame, no worry about her condition, no anxiey as to what is to become of her and the child.

She has no money and is without plans for the future, no doubt realizing that as long as her good looks last she will not want for money.

Her emotional nature is of the shallowest description, and her character defects are so obvious that she must be classed as a moral defective.

Such a woman is a menace to society, as she is the type of prostitute so dangerous from the standpoint of the spread of venereal disease. Legally it is impossible to do anything to help her or society beyond curing her of syphilis.

NATIONALITY

The question of nationality is an exceedingly important one as theoretically, of course, in dealing with a number of people whose average is under twenty, the inference is that Canadians would predominate, and would constitute at least seventy-five per cent of the total. It is somewhat surprising then to realize that they only make up 43.8%, the British born alone amounting to more than 23%, other nationalities contributing the remainder. Such facts as these are startling and cannot be ignored by those who have the future of Canada at heart. The obvious lesson is that supervision of immigration was not as careful in the past as it might have been.

It is true that at present the methods of inspection at Canadian ports are infinitely better than they were, and since the advent of the Federal Board of Health there has been an intelligent effort made to scrutinize the mentality of those arriving, but the difficulties are great and the cost of such inspection is necessarily high. When it is realized though that practically every failure costs the country a large sum of money, it becomes apparent that the cheapest plan is to provide adequate inspection.

Every one admits that we must have immigration on a large scale, but it is absolutely essential that this immigration must be of the right type. It is a simple matter to show the price we pay for inspection.

Here is a case which illustrates our point. Maggie C., a young woman of thirty, came to Canada twenty-five years ago. Her history was, that she could not learn anything at school, could not read, and was not able to write her name. Had a pleasing manner though, and like many defectives had some manual dexterity, learning to sew very well.

She began to drink gin and Scotch whiskey at an early age and followed a life of prostitution, finally giving birth to a child. She developed an acute form of dementia praecox, and as she said, passed through every gaol in London as a result of her many escapades. Eventually was confined in a home for inebriates where she gave little trouble. The "Lady Superior" said that a colony was the place for Maggie, as there she would get the benefit of new associations and surroundings, so the poor girl was deliberately shipped to Canada, and a place found for her as a domestic. At the end of the month she received her wages which she spent on whiskey and gin, and was at once confined in the gaol, where her mental condition was recognized and she was sent to an asylun where she has remained ever since. In other words, at the end of a month's residence in Canada Maggie became a public charge. Figuring her maintenance at $350, per annum, a modest estimate, she has already cost the Province of Ontario $8750, and if interest were compounded and overhead charges compiled it is readily seen why such people are not a profitable investment.

This is only the material side of the question though, and if one thinks of the hundreds of such cases which might be referred to and the cost calculated the result would be a staggering blow to those who say "pump the population in" no matter what the individuals are like.

Another aspect though must be considered. The insane person generally gravitates to an asylum and ceases to be a problem except for maintenance; not so the mental defective of high type who is a curse to himself and the whole community.

The Provinces have had to take what they received, and while it is true the deportation act helped to lesson some of the evils, a brief glance at statistics compiled in the West during recent visits shows that all of the Western Provinces are carrying burdens to which they are not entitled.

There is little difficulty in weeding out the low grade defectives, and the obviously insane, but the problem of the high grade defectives, scientifically called morons, is by no means a simple one, as these people so frequently grade up intellectually to the twelve year old scale, and are not easily detected except by those who are familiar and experienced in psychiatric and psychological methods. These are the immigrants who are the greatest menace of all to the community as they are so frequently anti- social in their inclinations and invariably select mental weaklings of their own class as partners ,thus perpetuating the race of defectives . A careful study of conditions in Manitoba made it abundantly clear that this Province has among its recently acquired immigrants an alarming number of persons of the moron type, and the cost to the Province is a serious matter. From this class are derived petty criminals of all kinds, prostitutes in large numbers, and persons who are constantly keeping themselves and those who have to associate with them, in hot water. To illustrate the point, we were called on to examine thirty-three girls, under temporary detention. Practically all were unmarried mothers; many of them had followed prostitution as an occupation; a large proportion were morons, whose mental defects would escape observation under any but the most rigid system of examination supplemented by a careful study of their life histories. These morons were in many instances of attractive appearance, glib in their answers and as nearly all of their class, amiable and easily managed under proper supervision.

An investigation of their careers revealed the fact that they had been hopeless in their behaviour since early childhood, their lives had been wayward and unmoral, and their conception of right and wrong was conclusive evidence of their inability to conform to the ordinary demands of decency. Nearly all had been inmates of Industrial Schools, and had been little or no trouble while under supervision, but the moment they were set at liberty, reverted to their former habits and became centres for

the propagation of venereal disease and illegitimacy. In this class too, are to be found many of the people who commit the most serious of criminal acts, including murder.

All social workers are agreed that in connection with immigration the detection of the moron is of the greatest importance as he has the ability to do so much injury in the way of developing vice and criminality.

When the figures concerning illegitimacy are scrutinized it is at once obvious that the defective immigrant has played a most important role in adding to the burdens of a new nation. A study of 767 mothers of illegitimate children was made by the Medical Director of the National Committee for Mental Hygiene, and as these mothers were in nearly every instance residents of Toronto it became interesting to know what their nationalities were.

As far as can be ascertained 91.18% of the population of Toronto are British born, including Canadians, 61.71% were born in Canada, the others coming under the headings, English, Scotch, Irish, Welsh; in other words the Canadian born are almost double the number of British, and yet only 45% of the 767 mothers of illegitimate children were Canadians and 44.7% British. These figures are startling and yet tell their own story especially when it is discovered that more than 7% of these unfortunate girls were imported by child immigration societies. It is useless to attempt to dodge the facts, and when we realize that 68% of these mothers were abnormal mentally the necessity of the most rigid methods of inspection is at once apparent. These figures will be read with some doubt by those who have not come in contact with the problem in a practical way, but as a matter of fact they understate rather than exaggerate the actual conditions. The mental examinations of these girls were most carefully made, and wherever possible a full social history obtained, knowing that the conclusions would be questioned by those whose knowledge of the conditions surrounding illegitimacy is to a great extent theoretical.

ILLEGITIMACY

A special study of 767 cases of mothers of illegitimate children was made between the years 1914 and 1920. The figures tell an interesting and instructive story and furnish invaluable data concerning a question, the importance of which is not always clearly understood, even by social workers. It may be said that war conditions made the proportion of domestics higher than might have been the case under other circumstances. During the war people requiring help accepted servants of low mentality rather than go without, and were not quite so particular regarding the moral standing of those they engaged as they were prior to

1914. Possibly this was a factor entering into the question, yet the same arguments held good for years previous to this. It merely shows that some kinds of labour have ceased to be attractive to the bright and efficient types of workers.

Possibly the day of the domestic drudge has passed, and we have now reached a period of readjustment requiring some action on the part of the employer and employee. When it is remembered that the great majority of the domestics examined were mental defectives it is not difficult to understand the reasons why they fell such easy victims and suffered so regularly. It was surprising to learn what high wages some of the lowest of the mental weaklings were receiving, the inference being that the reaction against household drudgery involves a great many of the heads of households who are willing to pay high rates for any kind of help.

The 767 mothers added no less than 917 children to the population, and it goes without saying that many of this number will be defectives, again increasing the tribulations of an already overburdened community.

Mental defect and illegitimacy go hand in hand no matter what may be said to the contrary, and the fact that 68% of those examined were abnormal should convince the most critical of the truth of the contention. Theorists maintain that these figures are too high, but it may be asserted most positively that if they err it is on the side of understating rather than exaggerating the facts. It is even asserted that the normal types fight shy of institutions and suffer in silence, but our experience does not enable us to accept such a theory without hesitation.

OCCUPATION

As will be readily understood the great majority of the cases coming to the Clinic were of school age, but of those who were employed it is significant that no less than 366 were factory operators. The question of occupation was not as carefully gone into as it might have been until a recent date, hence the percentage is much lower than would have been the case had a more deliberate study been made. That this is true is proved when a scrutiny of the figures from February 1st, 1921, to April 22nd, 1921, is made. During that time the factory workers numbered 52, or more than 27% of the whole, and the domestics 21, almost 9%. The individuals were females, and as the number of females was 117, the percentage furnished by the factory workers was 44%, and the domestics almost 18%.

What our experience has taught us, is, that no more fertile field for investigation exists than that furnished by factory workers of certain types, where small wages and simple occupations go hand in hand.

As may easily be understood from what has been said in other sections of this Bulletin immorality is rife in such centres. The explanation is not the one ordinarily offered, viz., that the low wages paid are the cause of the immorality, the truth being that the mental capacity of the wage earners precludes them from receiving more than they are paid. It is one of the economic problems not clearly understood by those not in possession of the facts. In a sense it is well that these weaklings can earn something, but it is also apparent that they should be under the most rigid and careful supervision, and that social service should recognize that here prevention has a true place. The facts supplied by the investigations in the clinic make it evident that intelligent effort in the line of prevention is desirable, and a careful survey of factories of the kind mentioned would reveal a state of affairs that will make plain certain truths already well known in the clinic.

What has been done in the past is simply to theorize, to criticize the employers who pay small wages for inefficient help, and to attribute immorality to causes which play but a little part in the failure of the mental weaklings. What social service must do is to accept the facts offered them to co-operate with the employers in bringing about the necessary changes and to aim at preventing the tragedies which may easily be forestalled by intelligent action. Incidentally it may be said that the spread of venereal diseases may be greatly curtailed by a proper supervision of these factories as the operators furnish a large proportion of the "joy riders" and "night hawks" who infest the country roads and streets after dark.

OCCUPATIONAL WANDERERS.

As was to be expected the Occupational Wanderers were many, but the statistics concerning these are by no means complete as it is only recently much attention has been paid to a phase of what will prove an interesting study. This group comprises of course the failures in industry who wander from pillar to post, failing everywhere through inefficiency, resulting either from low mentality or mental disease. No less than 30 "occupational wanderers" were found in the 188 cases studied recently.

This question of "occupational wanderers" will receive careful scrutiny in the future, and will prove of value to the student of industrial conditions etc.

WHAT THE FIGURES TEACH

From the statistics it is possible to arrive at some conclusions regarding the possibilities of prevention and to point out the duty of those workers who are endeavouring to grapple with the young problems re-

quiring attention. It is only too evident that prevention is the last rather than the first thing thought of by the average man. He is only interested in knowing what to do with the delinquent, for example, when he has committed his offence. It does not occur to him that the rational plan would be to so guard and direct and educate the mental weakling when found, that he will not fall by the wayside. It is difficult to upset the traditions of centuries but such facts as those presented must have their effect on the reflective mind.

An immense amount of time and study were devoted to getting the statistics together, but they will prove invaluable as a nucleus and will no doubt inspire true social reformers to greater efforts.

Appended are the figures in connection with the survey.

ILLEGITIMACY

Total number having illegitimate children	767
Canadians	45.4%
British	44.7%
Others	9.9%

Of these, 692 are single; 75 are married.

AGES

24 and under	5
25—20	250
10—25	301
35—30	98
10 and over	73

OCCUPATIONS

Domestics	373—48.6%
Factory	152—19.6%
Waitress	49—6.3%
Telephone operators	14—
Shop girls	43— 5.6%
Stenographers	14—
At home	43— 5.6%
Dressmakers	11—
Others	68—

ILLEGITIMACY

With 1 illegitimate child	652
With 2 illegiitmate children	84
With 3 illegitimate cchildrn	28
With 4 illegitimate children	2
With 5 illegitimate children	1
Total number of illegitimate children	917

VENEREAL DISEASE

Syphilis	64
G. C.	12

DIAGNOSIS

Mental Defective	444
Dementia Praecox	16
Normal	54
Dull Normal	8

Borderline	1
Not examined	244

68% of those examined proved abnormal mentally.
7.1% of the unmarried mothers were imported by child immigration societies.

STATISTICS FROM PSYCHIATRIC CLINIC—FEBRUARY 1ST, 1921 TO APRIL 22ND, 1921 (1 TO 188)

Number of cases examined	188

SEX

Male	71
Female	117

SOCIAL STATE

Single	152
Married	33

AGES

1—5	0
5—10	20
10—15	30
15—20	49
20—30	44
30 up	41

NATIONALITY

Canadian	110
English	47
Irish	5
Spanish	1
Russian	12
Scotch	7
U.S.A.	4
Austrian	2
West Indies	2
Newfoundland	1

NATIONALITY OF FOREIGN BORN PARENTS HAVING CANADIAN CHILDREN.

FATHER

Irish	4
English	9
Russian	1
Scotch	2
German	1
Dutch	1

MOTHER

Scotch	3
French	1
English	11
Irish	6
Russian	1
German	1

OCCUPATION

Domestic	21
Factory	52
Waitress	4
Clerk	6
Milliner	1
Tailor	1

Porter	1
Carpenter	1
Labourer	3
Stenographer	1
Artist	1
Contractor	1
Mechanic	1
Dancer	1
Hairdresser	1
Telephone Operator	1
Engineer	1
OCCUPATIONAL WANDERERS	30
FAILURES IN INDUSTRY	34

SOCIAL HISTORY

Immoral	59
Prostitute	37
Syphilis	16
G. C.	6

ILLEGITIMACY

With 1 illegitimate child	28
With 2 illegitimate children	8
With 3 illegitimate children	2
Sent by child immigration societies	9

DIAGNOSIS

Mental Defectives	101
Mongolian	2
Borderline	3
Mental Deficiency plus Dementia Praecox	2
Dementia Praecox	30
Psychopathic	5
Involutional Melancholia	5
Cerebral Syphilis	1
Manic Depressive Insanity	3
Senile Dementia	2
General Paresis	3
Normal	10
Deferred	2
Precocious	1

RECOMMENDATIONS

Recommended for institutions	33
Recommended for deportation	12
Special Class	3

STATISTICS FROM PSYCHIATRIC CLINIC, APRIL, 1914, TO APRIL 22ND, 1921

Total number of cases examined	5600

SEX

Male	3274—58.4 %
Female	2326—41.6 %

SOCIAL STATE

Married	1596—28.5 %
Single	3962—71.5 %

AGES

1—5	212— 3.7 %
5—10	816—14.5 %
10—15	1788—31.9 %
15—20	699—12.5 %
20—30	810—14.5 %
30 up	854—15.2 %

SOCIAL HISTORY

Immoral	928—39.8 %
Prostitute	693—29.8 %
Syphilis	258—
G. C.	112—

ILLEGITIMACY

With 1 illegitimate child	213— 9.1 %
With 2 illegitimate children	88— 3.7 %
With 3 illegitimate children	19— .81%
With 4 illegitimate children	2—

NATIONALITIES

English	997—17.8 %
Canadian	2456—43.8 %
Irish	110— 1.9 %
Italian	84—
Danish	2—
Scotch	206— 3.6 %
Austrian	31—
Russian	261— 4.6 %
U.S.A.	161— 2.8 %
Greek	7—
Bermuda	2—
West Indies	13—
Roumania	10—
Welsh	17—
German	6—
Assyrian	1—
Finland	11—
Norwegian	3—
Australiano	2—
Newfoundland	12—
French	6—
South African	4—
Dutch	2—
Phillipines	1—
Macedonian	2—
Maltese	2—
Siamese	1—
Spaniard	2—
Swede	1—
Jamaican	5—
Hungarian	1—
Serbian	2—
Belgian	1—
Chinese	2—
India	1—
New Zealand	1—

OCCUPATIONS

Domestic	113—

Factory	366—
Waitress	19—
Clerk	6—
Milliner	1—
Tailor	1—
Porter	1—
Carpenter	1—
Labourer	3—
Stenographers	9—
Artist	1—
Contractor	1—
Mechanic	1—
Dancer	2—
Hairdresser	1—
Telephone Operator	6—
Engineer	1—
Teacher	1—
Actress	1—
Nurse	3—
Soldiers	357—

DIAGNOSIS

Mental Defectives	2948—52.6 %	
Mental Deficiency plus Dementia Praecox	43— .76%	
Borderline	49— .87%	
Backward	63— 1.12%	
Mongolian	18— .32%	
Dementia Praecox	686—12.2 %	
Manic Depressive	63—	
Senile Dementia	46—	
Neurasthenia	7—	
Hysteria	1—	
Alcoholic Insanity	30—	
Exhaustion Psychoses	1—	
Involutional Melancholia	19—	
Toxic Insanity	2—	
Traumatic Insanity	5—	
Psychopathic	64—	
Hypochondriac	4—	
Cerebral Syphilis	1—	
General Paresis	60—	
Drug Habitue	1—	
Epilepsy	64—	
Chorea	5—	
Cretin	1—	
Normal	1023—	
Precocious	1—	
Dull Normal	4—	

Wanderers in occupation	128
Sent through child immigration societies	98

WHAT CAN A STATE HOSPITAL DO TO HELP IN THE STRUGGLE AGAINST SYPHILIS?

BY AARON J. ROSANOFF, M.D.

King's Park State Hospital, King's Park, N.Y.

1. Introductory Remarks

During the fiscal year ending June 30, 1920, there were 642 first admissions to this hospital. Of these 90, or 14%, were cases of cerebral syphillis or general paralysis, i.e., cases due directly to syphilitic infection.

This hospital draws from a population district which is partly urban and partly rural, contains native and foreign elements, white and colored, and may be considered a typical American district. The part played by syphilis as an etiological factor, as shown by these figures, may also be considered typical for the entire country. *A state hospital, therefore, is forced to take an active part in the struggle againts syphilis.*

Recently this hospital has perfected its organization for that purpose; the matter has been given considerable thought; and the object of this communication is to give a description of our organization for the consideration of those who may be planning to undertake similar activities.

Our work presents two phases: intramural and extramural.

2. Intramural Activities

The cases of syphilis which are met with among state hospital admissions may be classified as follows:

Systemic syphilis
- latent.
- active.

Neurosyphilis...
- mesoblastic ("cerebral syphilis").
- parenchymatous ("general paralysis").

As regards *latent systemic syphilis*, the main point is that it can be brought to light only by means of routine Wassermann tests practised in all cases admitted to the hospital. There is, as a rule, no etiological connection between the syphilis and the mental disorder in such cases.

However, they receive antisyphilitic treatment on general principles, and, in event of parole, provision is made for continuance of such treatment extramurally.

As regards *active systemic syphilis*, it need hardly be said that they too receive prompt, vigorous and persevering treatment, although in such cases too there is no etiological connection between the syphilis and the mental disorder.

Turning now to *neurosyphilis*, and confining our attention for the moment to cases of *mesoblastic invasion*, we find, as the most significant of recently discovered facts, that (1) such invasion occurs in a high percentage of cases early in the course of the infection, namely, in the primary and secondary stages, and (2) it may exist without giving rise to nervous or mental symptoms, or may manifest itself by slight, vague, or transient symptoms, so that there is danger of its being overlooked.

The practical bearing of these facts is that all cases of systemic syphilis, latent or active, should be, at some time in the course of their treatment, investigated by lumbar puncture, in order to dispose of the question of possible invasion of the central nervous system; and that no case of syphilis can be discharged as cured until not only the clinical and blood serum findings have been rendered persistently negative, but also the spinal fluid findings.

We now come to the consideration of *neurosyphilis* caused by *parenchymatous invasion*, i.e., general paralysis. In this connection the question is perhaps to be formulated as follows: Considering all past experience, which is discouraging, should such cases receive anti-syphilitic treatment at all? In my opinion the answer must be in the affirmative, mainly for the following reasons:

(1) It may now be considered as in the highest degree probable that all cases of neurosyphilis are, in the beginning, cases of mesoblastic invasion. Parenchymatous invasion is a later event, and there is no way of knowing the exact time of its taking place. Early in the course of neurosyphilis it is impossible to differentiate in all cases with entire certainty between mesoblastic and parenchymatous invasion either by means of clinical or serological findings. Even apparently advanced cases with manifestations seemingly pointing to mental deterioration may be cured by anti-syphilitic treatment, thus proving, in the end, to be cases not of parenchymatous but of mesoblastic invasion, in which temporary confusion was, in the mental examination, indistinguishable from established deterioration. Treatment is, accordingly, indicated, partly as a further aid in differential diagnosis, but mainly to give the patient the benefit of any existing doubt.

(2) Just as all cases of neurosyphilis are in the beginning cases of mesoblastic invasion, so all those known to us as parenchymatous in-

vasion are not such pure and simple, but are cases of parenchymatous invasion plus an admixture of an unknown amount of mesoblastic invasion as well. In a given case it is not possible to determine either by clinical or serological examination how great a part of the symptom-complex is attributable to the parenchymatous invasion and how great a part to the mesoblastic invasion.

It is a characteristic feature of mesoblastic invasion to show extremes of variation in clinical manifestations in different cases; also, from time to time, in the same case. Remissions in general paralysis, whether occurring spontaneously or following anti-syphilitic treatment, are probably attributable to abatement in intensity of that part of the pathological process which is dependent on mesoblastic invasion. This is borne out by the experience of all those who have attempted anti-syphilitic treatment in general paralysis; such experience having uniformly shown that remissions in general paralysis are far more frequent in treated than in untreated cases.

It may, therefore, be judged that, contrary to the view generally held but a few years ago, cases even of undoubted parenchymatous invasion can be benefited by antisyphilitic treatment, although we must still consider a cure to be entirely out of the question. Moreover, there is no way of knowing in a given case the amount of benefit to be expected, except by an actual test or treatment.

Accordingly, every case admitted to this hospital and diagnosed general paralysis receives, like other cases of syphilis, at least one course of antisyphilitic treatment.

3. Extramural Activities

These are carried out by a member of our Social Service Department, under the direction of a medical officer, and in connection with our Out-Patient Clinic.

The object is to induce the immediate relatives (wives or husbands and children) of syphilitic patients in the hospital to call at our Out-Patient Clinic for the purpose of having blood specimens taken for the Wassermann reaction. In cases of positive reaction free treatment is given. When indicated, lumbar puncture is performed in the patient's home.

The social worker, in calling on patients' relatives, is armed with the following letter from the hospital:—

Dear Sir or Madam:—

The Social Service Department of this hospital has recently undertaken activities for the prevention of syphilitic disease of the nervous system.

This and other similar institutions admit annually hundreds of patients suffering from mental disease arising from syphilitic infection acquired many years prior to admission. Many persons acquire such infection innocently, many others inherit it from the parents and are born with it. Whether acquired or inherited, such infection may exist without producing noticeable or marked symptoms and without the patient, therefore, being cognizant of it.

Early and thorough treatment of syphilitic infection can prevent the development of nervous and mental complications which eventually arise in a large percentage of untreated cases. Once such complications have arisen, the chance of cure is greatly reduced, and many cases run a progressive course towards a fatal termination in spite of all treatment.

Among the immediate relatives of patients suffering from general paralysis (softening of the brain), cerebral syphilis, and other syphilitic diseases of the nervous system there are a good many cases of syphilis without noticeable symptoms. In order to bring such cases to light and to place them under proper treatment it is advisable for all the near relatives of such patients, viz., wives, husbands, and children, to have the blood examined for the Wassermann test for syphilis.

Our hospital undertakes, for the protection of patients' relatives, the work of performing blood tests and instituting treatment, whenever necessary, at our Out-Patient Clinic, free of charge, for all those who are unable to arrange for similar service thru the family physician. Such examinations and treatment would cost any one a good many dollars, but this hospital is planning to do it at its own expense as a part of its work in the prevention of mental diseases.

All the information collected by us will be treated as confidential, in strict accord with professional etiquette. Our aim is not to pry into matters of strictly personal concern, but to preserve the health of those who might otherwise be threatened with serious ill-health sooner or later

If among the immediate relatives of a hospital patient one is found in whose case the Wassermann reaction is positive, then all the members of the family are subjected to an intensive investigation. For this purpose blank forms are used which have been suggested by Dr. George H. Kirby, Director of the New York State Psychiatric Institute. These forms are reprinted herewith. It will be noted that special forms are provided for men, women, and children. It is hoped that eventually there will be an accumulation of records from which useful information will be available as to the manner in which syphilitic infection spreads in families and how its spread might be prevented.

We believe that just as we have witnessed the dwindling of the incidence of alcoholic psychoses to an insignificant percentage among our admissions, so it is possible, by appropriate activities, in which a state hospital can participate, to reduce the incidence of psychoses of syphilitic origin.

MAN

No.....

Name of patient in K.P.S.H.....
Date of admission.....
Name and address of informant.....

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1. Name of person studied.....Relation to patient.....
2. Address.....Age.....
3. Nativity.....Time in U.S.....Civil condition.....
4. Number of marriages.....
5. If divorced or separated, give reasons.....
6. Number of children.....(state names and ages—indicate if illegitimate or by former or present marriage).....
7. What was sexual life before marriage and during widowhood?.....
8. Extra marital relations during married life; details.....
9. Has wife had syphilis?.....
10. Has he had syphilis?
    - A. When contracted—age or date?.....
    - B. How contracted—prostitute, friend, wife, extra-genital?.....
    - C. Has he had gonorrhoea or a discharge?.....
    - D. When was diagnosis of syphilis made?.....
    - E. How was diagnosis of syphilis made—clinically—Wassermann Reaction?.....
    - F. What symptoms of syphilis has he had and when did they first appear?.....
11. Has he been treated for syphilis?.....
    - A. When—ages and dates and for how long?.....
    - B. Where—(clinic or hospital) or by whom?.....
    - C. Character of treatment?.....
12. Report of Wassermann Reaction on blood—Dates?.....
13. Report of examination of cerebrospinal fluid—Dates?.....
14. Mental status (Physician's observation).....
15. Physical status (Physician's observation).....
16. If dead, give age, or date and cause, of death.....
17. Remarks.....

.....Social Worker.

Date.....

WOMAN

No.....

Name of patient in K.P.S.H.....
Date of admission.....
Name and address of informant.....

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1. Name of person studied.....Relation to patient.....
2. Address.....Age.....
3. Nativity.....Time in U.S.....Civil condition.....
4. Number of marriages.....
5. If divorced or separated, give reasons.....
6. Number of pregnancies.....(miscarriages, still births, living children—arrange chronologically giving dates, also names and ages of living children—indicate if illegitimate or by former or present marriage).....
7. Before marriage, mode of living, social activities, sexual life, occupation and source of income.....
8. During widowhood, social activities, sexual life, occupation and source of income.....
9. Extra-marital relations during married llfe—details.....
10. Illnesses—especially obscure or ill-defined sicknesses.....
11. Has husband had syphilis?.....
12. Has she had syphilis?.....
    - A. When contracted, age or date?.....
    - B. How contracted, friend, husband, extra-genital?.....
    - C. Has she had gonorrhoea?.....
    - D. When was diagnosis of syphilis made?.....
    - E. How was diagnosis of syphilis made?—clinically or Wassermann Reaction?.....
    - F. What symptoms of syphilis has she had and when did they first appear?.....
13. Has she been treated for syphilis?.....

A. When—ages and dates—and for how long?.....
B. Where—(clinic or hospital) or by whom?.....
C. Character of treatment?.....
14. Report of Wassermann Reaction on blood—dates?.....
15. Report of examination of cerebrospinal fluid—dates?.....
16. Mental status (Physician's observation).....
17. Physical Status (Physician's observation).....
18. If dead—give age or date and cause of death.....
19. Remarks.....

.....Social Worker.

Date.....

CHILD
No.....

Name of patient in K.P.S.H.....
Date of Admission.....
Name and address of informant.....

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1. Name of person studied.....Relation to patient.....
2. Address.....Age.....
3. Nativity.....Time in U.S.....Date of Birth.....
4. Condition at birth and early history:
   A. Normal or abnormal—if abnormal, state in what respect.....
   B. Signs of syphilis (rash, eruption, sores, snuffles, eyes, sore, discharging, ulcer, vision, hearing, marasmus, meningitis, skin wrinkled, appearance of an old man, convulsions).....
   C. Well, sickly, or delicate—details.....
5. Development during first 2 years:
   A. Age cut teeth..... B. Age talked.....C. Age walked.....
   D. Did child appear bright.....
6. Illnesses (Diseases, age, suration, treated in home, in hospital, was a physician consulted, did child recover—has child a nervous disorder).....
7. Physical development—(Are there any striking abnormalities or defects present? If so, describe; age, when appeared).....
8. Mental development:
   A. School history (Age attended and stopped, grade reached, if left school before graduation, why—were classes repeated, why—is the child bright?).....
   B. Social history (What can be said about the disposition of the child, does he play like other children—if different from other children, in what way, does child show any delinquent or criminal tendencies or traits—has child any bad sexual habits?).....
9. Is child feebleminded—give details.....
10. Economic history (In children who have left school—give occupation—efficiency, duration of positions—reasons for changing).....
11. Has child had syphilis?.....
    A. Congenital or acquired..... B. How and when acquired.....
    C. When and how was diagnosis made, clinically or Wasserman Reaction?.....
    D. What symptoms of syphilis has child and when did they appear?.....
12. Has child had treatment for syphilis?.....
    A. When—ages and dates—for how long?.....
    B. Where (clinic or hospital) or by whom?.....
    C. Character of treatment?.....
13. Report of blood Wassermann Reaction—dates?.....
14. Report of examination of cerebrospinal fluid—dates?.....
15. Mental status (Physician's observation).....
16. Physical status (Physician's observation).....
17. If dead, give age, date and cause of death.....

In adult children or offspring inquire if married and get data concerning wife or husband and children)

.....Social Worker.

Date.....

DEMOCRACY AND MENTAL HYGIENE

BY WILLIAM D. TAIT, PH.D.

IT is a truism to say that it is the duty of leaders to lead. There is one aspect of democracy as practised to-day which appears to prevent true leadership. This defect is not inherent in the democratic principle itself but appears to have been accepted in some way or other and has, to a certain extent, become a tradition in democratic countries. Men who are elected to represent the people in deliberative assemblies do not regard themselves as leaders of the people, nor do the people so regard them. Those deputed to enact legislation, therefore, consider themselves as bound to follow the immediate will of the people and do not think that they should lead the people onward on a higher and more developed form of the peoples own will.

This attitude, both on the part of people and representatives, hinders democracy from coming to its own and reaching higher than average political mind. It prevents democracy from rising above the present level and producing aristocrats in the true sense of the term. In a word, it prevents democracy from finding leaders. The state is thus left to struggle blindly on without expert guidance. Those chosen by democratic methods, and this is where the true meaning of democracy lies, should keep in view that they are chosen to make progress—not to follow the mass, but to lead. The people, too, should so regard those whom they themselves place in authority. They are there to represent the people on the road of advancement. All cannot be leaders for then there would be no leaders. Democracies differ from absolute monarchies, tyrannies, oligarchies in that the people choose who shall lead. It should not necessarily follow from this that those selected are to consider themselves as mere agents. No business could be run on the principle that the president and the directors were to be merely the echoes of the shareholders. On the contrary, they are placed in office to advance the interests of the company and it is this point of view which has been lost sight of in affairs of state. This is the reason why state activities are so often behindhand. Men at the head of affairs wait until the mass has begun to move and have either forgotten that they are supposed to lead or are too timorous to do so. It may be that the desire for office accounts for this attitude on the part of legislatures, but it does not account for it on the part of the people. This weakness in democratic affairs can be easily remedied if only men of courage, vision, high-minded ideals, and unselfishness are selected to direct. The reason that such are so in-

frequently elected is a serious indictment upon our civilization, a symptom that the dearth of leaders in civilized countries is to be attributed to a lowered state of intelligence and enlightenment.

The individual and his merits are lost in the mass of opinions, and hence one of the greatest problems of the time is to find the individual. In past ages, the individual was prominent to the exclusion of the many. To-day, the many is prominent to the exclusion of the individual, and there has been lost the secret of finding leaders in state affairs. Private concerns find no such difficulty for the worth of the individual is recognized by an intelligent group. Not so with the mass of the people. If democracy would move forward to an aristocracy of worth, some elimination must take place in order that the stupid, or those unable to exercise the rights of citizenship, will not have a voice for control. In order that democracy be fully actualized, it must devise a method of choosing leaders on the part of the people and a realization of those so chosen in what their duty consists. After all, a country is great because of its great men. That few of them are found in the direct governing of the country is a reflection on democracy and evidence that the principles of this great movement are not yet appreciated by the mass.

During the last few years, groups have grown up, or perhaps they have become more manifest. This aspect of our political life is detrimental to any democracy. When a seat in parliament represents any one group, then we are back to the days of oligarchy and not necessarily an intelligent or moral one. By this means certain groups are undermining the very principles of democracy, because the political strife is really a battle between the various groups and not one of general welfare to the country. What greatness and accomplishment has taken place in the world has been due to the labours of great men, not of great groups. Consider the progress in science, in art, in literature, in religion and it all harks back to the contribution of individuals. Individualism in the old sense is dead, but we require a new individualism to-day, else we perish. To save democracy we must save the individual from the tyranny of the mass. If democracy is to be true to its own faith, if it is to govern in such a way as to give all possible opportunity to all men in accordance with their talents, then it cannot afford to lose sight of the fact that the individual must be preserved for the attainment of this ideal.

It may seem a far cry from leadership and democracy to mental hygiene. Yet it will be found that they are intimately connected, for our government is but the reflection of the average mentality of our people and if this is lowered by bad stock or weakened by too much pampering legislation, then we shall lack the ability to produce leaders and even those who are fit to be leaders will have their task made an impossible

one by reason of the low degree of intelligence or absence of moral stamina. The most important thing in this world is the human mind. The human mind is the real conqueror of nature. The human mind gives us the rich world of imagination portrayed in literature, art and folk-lore. Our chief aim, then, as a race should be to produce the highest type of mentality and insure that it is immortalized from generation to generation by being associated with an equally superior body. From the racial and long distance point of view, mind cannot exist and function without body. Racially, a superior mind can only exist in conjunction with a superior body. If the mind alone is developed, the very ideal set before us is defeated for the body will be weak and a brilliant mind will cease when a certain body perishes. If the body had also been developed, the mind would have become an inheritance. History shows us that it is the physically stable races which survive; therefore, the preservation of healthy minds and the accumulation of such minds as a racial acquirement depends on an all round development—body and mind together.

It would appear that in the present era of western civilization there is too much maternalism. Some use the term paternalism but the attitude is too soft, tender and almost flabby to be designated by a masculine term. Due to this attitude the unfits, misfits and ineffectives are kept alive, nourished and protected as a Christian virtue although one fails to find good scripture as its basis, but rather the reverse. This class of worse than drones are allowed to multiply and multiply they do. By defeating the law of natural selection, feeble minds and feeble bodies are allowed to come into existence, allowed to reproduce their kind and thus lower the general well-being. In a sterner and more virile sort of society this does not happen. These people are not contributing to the good or betterment of the world, but rather they make many hideous and baffling problems. We not only tolerate them, but support them because of a false interpretation of what is meant by racial hygiene. In former times, many factors played a part in the elimination of the unfit in mind and body such as exposure, syphilis, alcohol, war, etc. On the whole, only the more rugged survived, that is, those who could resist temptation or had the intelligence to protect themselves from dangers. Now all things are changed and instead of looking after ourselves we look after one another. No longer do self-denial, self-restraint, temperance, initiative and aggressiveness count. We cannot do evil even if we wished. Our civilization has become one great comfy hostel where there are no dangers, no temptations, a place where the sterner qualities are no longer cultivated because they are no longer necessary in the struggle to live, for there is to be no more struggle if the weaklings have their way. Mediocrity controls. The fit still survive but the unfit still more survive, and the time, the energy, the intelligence and the

moral forces of the intelligent part of the community are wasted in caring and protecting these unfortunates. Thanks to our mistaken, unscientific and unoriented social welfare schemes, the drones and wastrels of society are on the increase and in proportion as they increase will the fit be hindered and impeded on the path to knowledge, truth and betterment.

Prevention is a fine ideal but usually it does not commence its activities far enough back. A portion of the child welfare activities which we hear much about should not be necessary. For example, many communities boast of a low infant mortality rate. This can be accounted for in two ways. In the first place, if the community is intelligent, of course the infant mortality will be low. The birth rate may also be low but there is a greater care for the young. In fact, this holds true as we rise in the scale of intelligence throughout the animal kingdom. In the second place, the infant mortality rate may be lowered by caring for the offspring of those who cannot care for their own. In other words, the rate is lowered in many cases by saving the children of the less fit. It follows then that an artificially lowered mortality rate is not necessarily an index of high community intelligence or morality. It does indicate a tender spirit towards the weaker and helpless and is good in so far as it does not detract from our racial integrity and worth or weaken the racial fibre. If the care of infants means the survival of ineffectives, then such activities have the tendency to lower our national standards in education, government and the higher things of life. It is well that social workers should ponder over this fact.

This brings us to discuss politics and mental hygiene in a closer sense. In proportion as we allow certain types to reproduce and then foster them, just in so far are we lowering the general intelligence of the nation. These people have the vote just as the best. They may have money or they may not. One thing is certain—they do not stand for the highest and best international life. Yet our reformers are out to protect them because they cannot protect themselves. Society will never be reformed or reconstructed or made better by protecting those who do not wish to protect themselves or their own. Society may be made more comfortable but that is not an ideal for men with red blood in their veins. A civilization from which all the risk, chance and zest have been bleached has no appeal except to the moral or intellectual weakling, to the one who has not the courage to face the realities of life and by striving live and find himself. A civilization without opportunity for aggressiveness, without, if you like, the possibility of perishing or going to the devil, has nothing to offer to the normal or superior man with instincts and impulses demanding expression. A cut and dried prayer meeting sort of society does away with the individual and his worth, and swamps him

in a muddle of maternalistic patter and subnormal reactions to environment. An aseptic society is not necessarily progressive.

Leadership, then, in the true sense of the term can only come about by substituting something for the law of natural selection. Great men can only be begotten by great men. Leaders in any sphere of life are not produced by environment, although it may furnish the opportunity. If we permit the racial stock to be impoverished, then we lessen the chance of, or forbid, the birth of leaders. Even if they are on occasion born, their efforts are to a certain extent nullified by the subnormals. In a word, by softening our civilization we are depriving ourselves of the possibilities of leaders, or, to put it otherwise, we choose mediocrities in their place. It would seem that the intelligence of mankind and the scientific results of that intelligence have been applied towards sustaining those who have small survival value. Intelligence thus directed is self-destructive and is proceeding along the path of racial extinction. Plato was right when he argued that the state should be governed by the philosophers and not by the rabble. The same problem is facing us to-day as faced Greece in the time of Plato. His advice was not followed and he who runs may read the consequences for us.

Some of the mistaken beliefs which are so prevalent to-day are due to the very evident trend to view all reforms and attempt the solution of all social problems from the economic point of view. The whole industrial situation is regarded as exclusively economic and the political efforts are really secondary to the economic. Even if all these so-called remedies were applied there would still be an "industrial situation." Here, too, is found, as in other aspects of the social fabric, the abnormal desire to overprotect the weaker brother. The ineffective workman is guarded by his more skilled and effective brother and to that extent lessens his service both in amount and in quality. The measure of service is the measure of the unfit, not of the fit. Thus it happens that the low grade workman is economically the equal of the superior workman, and the latter wonders why he must pay high taxes to support fleets and armies. In this he fails to see that it is those same fleets and armies which enable him to live, for otherwise he and his weaker brother would be replaced by the cheaper labour of those people whose standard of living is lower than ours. Our scale of living costs more than it should, but the cost is due to the manner of regarding the ineffective. What applies to the workman applies with redoubled emphasis to the wealthy loafer and ineffective, who has inherited his status instead of earning it. The whole question is much deeper than economics or politics.

Until our people as a whole give up the notion of ultra protection to the defectives, weaklings and ineffectives generally, or, at least prevent them from interfering with those who construct, until we stiffen

the national backbone and put an end to social patchwork, there appears little hope for improvement. Human nature of the right kind will reconstruct itself if left to itself. The intelligent and moral people of the nation require no reconstruction. The many organizations aiming at the more comfortable world are really making mankind less resistant and thereby lessening the power of survival. We need leaders and leadership, but we are defeating our own purpose by preventing the exercise of those natural laws which eliminate the unfit. Am I my brother's keeper? Yes, by preventing the necessity of calling him a brother, by keeping him in his place if he has arrived, by seeing to it that he does not beget his kind if he is one of the class that are of little use to humanity, or, if he is one of the elect and of good report, developing in him those qualities which lead to greatness in man and nation. We are certainly our brother's keeper, but too much keeping of a kind may spoil the brother and be of no value to the world. There is much good psychology in the parable of the talents. Not all men have equal talents and this is not always realized by our would be reformers. "To him that hath shall be given and from him that hath not shall be taken away even that which he hath." Our soft minded reformers have forgotten this stern aspect of Christianity, but it is well that it should be borne in mind. Protection and repression for the sake of protection will never lead to the realization of a healthy and progressive civilization. We must rid ourselves of the weak, else we perish with him; we must save the race, not the individual, and we can only save the race by cultivating the superior type. We must set as our objective an aristocracy of mind as the highest ideal of democracy.

Science instead of being used to patch up the wrecks should be used to make the race stronger, more virile, should aid us in perpetuating those great moral qualities which insure national sanity and stability. Mere shielding from the dangers of life by external organization will not lead to the desired end. The individual must be given the opportunity of looking after himself, of saving his own soul because no one else can do it. Some will fall by the wayside, but those who have passed through the fire will be able to lead us forward towards the goal of true democracy. A moral tyranny in the state is just as detrimental to democracy as political tyranny.

CRITICAL SURVEY OF INTELLIGENCE TESTING

BY PETER SANDIFORD

Toronto

THE measurement of intelligence is no new thing, although it is only within the last decade that it has achieved a world-wide popularity and acceptance. Galton's studies in England may be said to have led to a study of individual differences in intelligence, which, in turn, has led to the introduction of more refined tests of intelligence than Galton employed. In Germany Weber's discovery of the psychophysical law and Fechner's mathematical interpretations of it, created an enthusiasm for psychological investigation and research. Psychological laboratories were installed in most of the universities and the era of brass instrument psychology began. One of the experimental fields—that of reaction-times—assiduously cultivated by plodding German psychologists, really directed experimentalists towards the problem of measuring intelligence. It was thought that reaction-times provided a sort of divining rod by means of which, intellectually speaking, the sheep could be unerringly separated from the goats. But after millions of experiments had been performed, it was found that reaction-times measured reaction-times and not intelligence. Yet it was J. McKeen Cattell, an American student, who early went to the German psychological laboratories, and returning to Columbia University, established "Mental Tests and Measurements" as an integral part of American psychological courses. Successive generations of Columbia students were given a series of physical and mental tests and as late as 1908-10 the writer of this paper was put through his paces with them. Cattell was really investigating individual differences in sensitivity, visual and auditory acuity and the like, but he stumbled on a method which, in essence, has been used to measure intelligence ever since. He used many tests, not a single one, and although most of the tests he used did not correlate very highly with intelligence, subsequent investigators have discovered many that do. Thorndike has been especially fertile in devising new tests, and it may be truly said of him that he is the J. J. Thomson of psychology.

It was owing to the genius of the French psychologist, Binet, that the measurement of intelligence became an international movement. He saw, more clearly than any of his contemporaries, that intelligence was many-sided and must be measured in greatly diversified ways. It

must also be measured by tests which appealed to the higher and more complex processes of mind, for it was in these that the greater distinctions between the stupid and the clever lay. To Binet must also be given the credit for introducing a series of tests for each year of child life, and for using the average performance of children of a given age (age-norms) as the standard for that age. Terman's revision of the Binet tests made them available for English-speaking persons on the North American continent, and Terman deserves a high place of honour among psychologists for the work he has done.

A great injustice would be done if, in this brief account of the development of intelligence testing, mention was not made of the work of Cyril Burt in England. Burt, like Binet, was concerned chiefly with tests of the higher mental processes. The invention or evaluation of tests such as analogies, syllogisms, etc., now so widely used in group intelligence tests, must be attributed to him.

On the later work of Yorkes and Bridges, Pintner, Paterson, Otis, Haggerty, Whipple, and Yoakum, there is not time to dwell.

What seems to be needed at this juncture is a critical analysis of intelligence testing so that we may see exactly where we stand. There is so much uncritical acceptance and actual misinterpretation of the results of intelligence tests on the part of Canadians, that the writer, who has done his share in making the various tests widely known, begins to feel twinges of conscience. The rest of the paper will be devoted to a critical survey of intelligence tests and an exposition of some of the unsolved difficulties in connection with intelligence testing.

I. The Nature of Intelligence

It will probably surprise most of my audience to learn that psychologists are far from being in agreement as to the real nature of intelligence. In general the older viewpoint is that of intelligence as "adaptability to new problems and conditions of life." Colvin modifies this and gives the following definition: "An individual possesses intelligence in so far as he has learned, or can learn to adjust himself to his environment." The modification eliminates instinctive adaptations and includes only those which have been acquired through experience. Recently Thorndike has said: "Realising that definitions and distinctions are pragmatic, we may then define intellect in general as the power of good responses from the point of view of truth or fact." Binet defined it as "the possession of judgment, otherwise good sense, initiative, the faculty of adapting oneself to circumstances."

While these varying definitions can easily be reconciled, the question as to whether intelligence is multi-focal or uni-focal is still unanswered,

although the multi-focal view is gaining ground. Thorndike, who may be regarded as the protagonist of the multi-focal view, regards intelligence as the sum total of many minor special intelligences, each one distinct from all the others and requiring separate treatment in its training. These various minor intelligences exhibit concomitant variation, that is, they tend to rise and fall together. If a person is clever along one line he is likely to be clever along others; if he is stupid in one thing he is likely to be stupid in many. According to Thorndike there is no such thing as 'general' intelligence; there are only particular intelligences exhibiting a fairly close correlation. Spearman, the leader of the uni-focalists, believes that intelligence is general rather than specific. It is equivalent to, or rather is due to, a common factor of cortical energy which may be directed at will into any given channel. Thus the highly intelligent man may direct his energy into any kind of activity and in it achieve success. The possession of general intelligence is the primary factor: its direction the secondary. This explains why clever men 'make good' in so many ways.

Fortunately for those who concern themselves with the measurement of intelligence, it does not matter which view is held. Both the uni-focal and the multi-focal views require a variety of tests, preferably those which deal with the higher mental powers of abstract thinking, since intelligence is either directed into numerous channels or is of many kinds. But it certainly matters greatly which view is held when we come to the problem of training or developing the intelligence of children. Thorndike's view requires us to give specific training to each mental power and capacity; he rejects with contumely the cruder elements in the doctrine of formal discipline. Spearman's views, on the other hand, rather lend support to the doctrine. Since intelligence is general, it may be trained as a whole (which is certainly not the case), and any material may be used in the training.

If intelligence implies the power of adapting oneself to novel situations it certainly demands facile adjustments in the nervous system. The writer believes that, at bottom, intelligence is nothing more nor less than a function of the central nervous system. If a person has a nervous system which integrates easily and tenaciously, he is likely to be bright and intelligent; if on the other hand his associative connections are made with difficulty, he is likely to be dull and stupid. Specific training is still needed to form the association paths (Thorndike's view), but the learning is easy if there is good nerve stuff to work on (Spearman's central factor). This definition, therefore, reconciles the uni-focal and the multi-focal views.

But our difficulties over the nature of intelligence are not at an end. The word intelligence was formerly used as a synonym for brightness.

Intelligence in this sense of the term was something that remained more or less constant throughout life. Intelligence as brightness refers, therefore, to the mental powers of a person contrasted with those of his own age. It is always a relation. A bright child has relatively more intelligence than other children of the same age.

Since Binet introduced the concept of mental age into psychology, intelligence and mental age have come to mean the same thing. They are certainly used interchangeably. Intelligence in this sense increases with age; it refers to a child's degree of mental development or mental maturity—how far his mental growth has progressed. It is an absolute not a relative thing.

This second use of the term has become so common that it is best to stick to it now, using brightness only when one wants to refer to intelligence in the relative as opposed to the absolute sense.

II. What is an Intelligence Test?

An intelligence test is obviously something which tests intelligence; it is a test which helps us to distinguish levels or grades of intelligence among pupils with some degree of certainty. Some tests do this better than others. That test is best which, when applied to a group of children, arranges them most nearly in the order of their intelligence. But this is obviously begging the question. What is the order of their intelligence? The order is that in which competent observers would place the children as a result of daily observation, of questioning, of examining, and of information gained in any other way. The teacher, for example, is a competent observer and can make very shrewd guesses of the degree of intelligence possessed by each of the pupils under his charge. If a test gives results which are found to agree with a larger number of teachers' judgments, it is classed as a good test. As a matter of fact good tests are discovered in this very way. The point to notice is this—that a test of intelligence is referred ultimately to persons who know intimately the subjects who submit themselves to the tests. In rating a test we average, as it were, hundreds of pupils' performances and scores of teachers' judgments respecting them. It is in this manner that we can say that a language completion test is a better intelligence test than a list of spellings. The language completion test correlates more highly, as we say, with teachers' and other persons' naive judgments than spellings do. In other words children who do language completion tests well are on the whole more intelligent than those who merely spell correctly.

We can also work backwards and check up any single teacher's judgments by means of intelligence tests upon his pupils. This in

essence is checking up one judgment against the average judgment of scores of others. The whole thing runs in a circle; fortunately it is not a vicious circle.

An intelligence test, therefore, may be defined as a standardised examination. As time is a part of the contract, the test must be of short duration. Since intelligence is exhibited in diverse ways the tests must be varied in type as much as possible. Hence some are written, many are oral, while others, again, test some form of skill.

It will thus be seen that there is no royal road in the making of intelligence tests. Good tests are only discovered by 'trial and error' methods, the less successful ones being gradually eliminated. The good test is that which confirms the naive judgment of the world regarding that elusive quality we call intelligence.

III. THE STANDARDISATION OF TESTS

When we think of standards in regard to various physical measurements such as length and temperature, we think of something that may be used successfully and in non-varying fashion anywhere and at any time. In all standards also there are zeros or reference points to which all measurements are referred. These criteria should be employed in standardising tests. A test is standardised for any group (say eight-year-olds) when the addition of further results or records obtained from the test does not alter either the median score or the deviation obtained from earlier records. If this is not the case, the testing must be continued with unselected subjects until the central tendency and the deviation have achieved constancy. The difficulty of reference point or zero is far from being solved. In temperature we have two zeros—the zeros of the Fahrenheit and the Centigrade scales respectively. In mental measurements the reference points are exceedingly numerous. There is a zero point for each scale. McCall has recommended the adoption of an arbitrary but workable reference point, namely, the mean performance of children between the ages of 12 and 13. Such a reference point, while not a zero, can be used for any mental trait regardless of the location of its absolute zero, if such there be. For the unit of the scale he proposes the standard deviation of the variability of twelve-year-old pupils multiplied by ten. The adoption of such a reference point and unit would overcome many difficulties. For example, in the Binet-Simon scale the zero is the time of birth, and the unit one year of mental growth. The zero is one that everybody understands, but the unit varies from year to year. As we shall see later the amount of mental growth between 5 and 6 is probably much greater than between 15 and 16. The S.D.-multiplied-by-ten of twelve-year-old children unit is equal at all points

on the scale. Although a little more difficult for the average person to comprehend, it will probably be adopted in the standardisation of new scales. McCall proposes to call the new unit a Thorndike-Terman unit, or for brevity a 'T.'

In standardising any scale unselected subjects must be used. These are very different to obtain. A test, like the Terman revision of the Binet-Simon scale, standardised on subjects found in California schools, may give erroneous results if used in other parts of North America. It will only be reliable if the average intelligence of California children is the same as that of children found elsewhere. The safest way is to obtain regional standardisations. All the American tests should be re-standardised, say, for Ontario, if they are to prove of the greatest service here. Let me illustrate from a subject test—Ayre's spelling test—which has been extensively used in Ontario. Ayre's test gives results that prove indubitably that children in Ontario are better spellers than children of the same age in the United States. The spelling of Ontario children, therefore, should be judged by Ontario, not by American, standards or we may become too easily satisfied with our achievements. There is so much profit to publishers and authors in scales and tests that scores of imperfectly standardised ones are being rushed on to the market. Even Terman's standardisation, probably as carefully standardised as any test on the market, only involved the examination of 2,300 subjects—1,700 normal children, 200 defective and superior children, and 400 adults. The highest Intelligence Quotient (infra) obtainable by an adult in Terman's test is only 121.8. During the past two or three years students in the Ontario College of Education have been re-standardising tests, and the results so far obtained have shown the urgent necessity for such work.

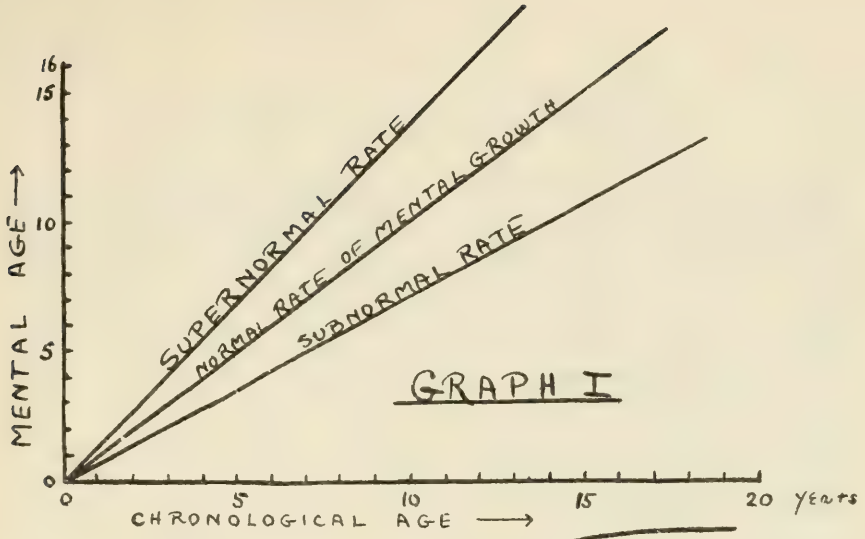
IV. Methods of Expressing the Results of Measurements of Intelligence:

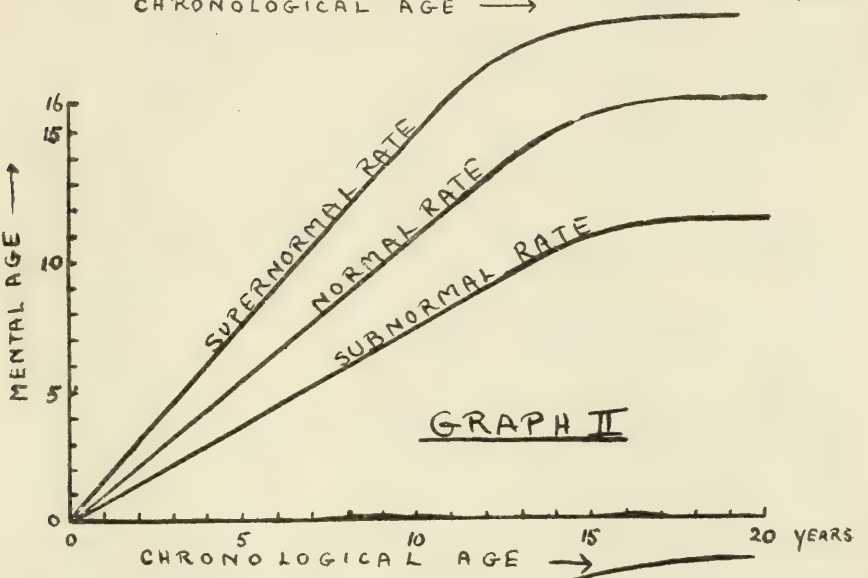
The commonest methods of expressing the results of measurements of intelligence are:

(a) Mental Age (M.A.).
(b) Age Difference.
(c) Intelligence Quotient (I.Q.).
(d) Co-efficient of Intelligence (C.I.).
(e) Index of Brightness (I.B.).
(f) Percentile Rank (P.R.).

Not one of these methods is entirely satisfactory.

(a) *Mental Age.* This was one of the earliest methods to be adopted. It was made popular by Binet & Simon, although the concept had


MENTAL AGE ⟶
16
15
10
5
0
SUPERNORMAL RATE
NORMAL RATE OF MENTAL GROWTH
SUBNORMAL RATE
GRAPH I
0
5
10
15
20 YEARS
CHRONOLOGICAL AGE ⟶


MENTAL AGE ⟶
16
15
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SUPERNORMAL RATE
NORMAL RATE
SUBNORMAL RATE
GRAPH II
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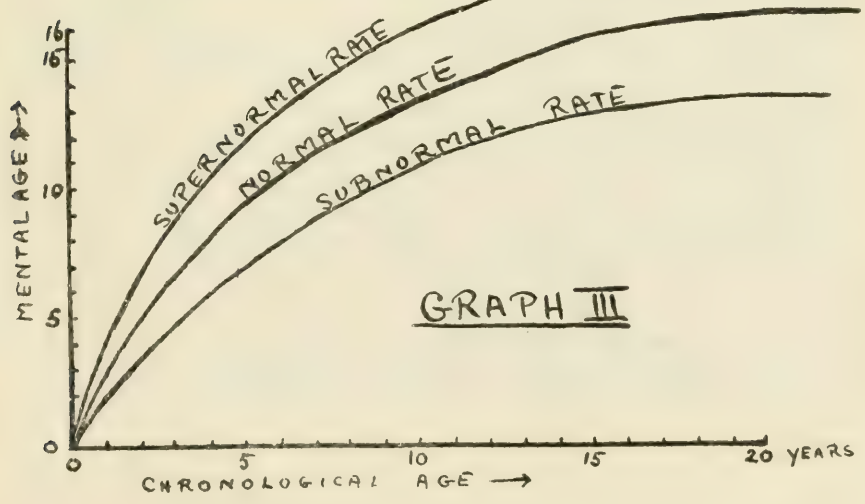
20 YEARS
CHRONOLOGICAL AGE ⟶


MENTAL AGE ⟶
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SUBNORMAL RATE
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20 YEARS
CHRONOLOGICAL AGE ⟶

been 'in the air' for almost a century. Mental age means a certain degree or amount of intelligence. Normally this amount increases with age. A child of ten years has a greater mental age than he had at six, and on the average eight-year-old pupils have a greater mental age than seven-year-olds. Children mature in intelligence at different rates. Some pass through the mental ages quickly; these are the bright ones. Some mature slowly; these are the dull and stupid ones. Mental age is determined by intelligence tests; it is a performance level; it is a score obtained in an intelligence test. A child of any age obtaining a score which on the average is obtained by eight-year-olds is said to have a mental age of eight years.

There are two important and still unsettled problems in connection with mental age. The first concerns the amount of the yearly increments of intelligence, that is, its rate of growth. The second deals with the age of maturity of intelligence.

In connection with the first of these problems we may ask—is the yearly increment of intelligence constant in amount? This question may be made plainer by means of a series of graphs.

Graph I shows a constant rate of growth in mental age. The upper limit is indeterminate; mental age increases throughout life. The increment of growth between four and five is the same as the increment between ten and eleven. Graph I is certainly not true to facts for the annual increments are probably not the same over the whole range and there is certainly an upper limit or age of maturity of intelligence.

Graph II shows a steady rate of growth to the onset of adolescence followed by a rapid decrease until maturity is reached. Data derived from the use of the Binet Scale seem to show that Graph II gives the true story of mental growth.

Graph III shows a gradually decreasing increment with age. The normal one is a logarithmic curve (y—log x). Growth continues throughout life, though the increase after early adolescence (16 to 18) is almost a negligible quantity. On theoretical grounds, Graph III would seem to be the correct one. The curve of physical growth, except for the adolescent spurt, is practically a logarithmic curve. The curve of the growth of the brain is also logarithmic. Why should not growth in intelligence follow a similar course? All that can be said at present is that Graph I is untrue; Graph II or Graph III may be true. There is evidence in support of both. But, after all, may there not be rythms in mental growth? In that case no smooth curve could possibly represent it.

The second unsolved problem in connection with mental age is that of the age of maturity of intelligence. Although we may increase our stocks of knowledge almost to the end of life, it is obvious to all

that our intelligence does not so increase. It reaches a limit fairly early in life. Binet considered that intelligence reached its maturity at fifteen. Terman fixed it at sixteen. Ballard by means of an extended Binet absurdities test determined it experimentally to be sixteen. Monroe and Otis both regard eighteen as the age of maturity of intelligence. Doll collected a mass of evidence, chief among which was the average mental age of drafted recruits in the United States army, which seemed to indicate that it should be reduced to thirteen years. There is room for much research work on this important problem of mental age. The validity of the Intelligence Quotient is dependent on both the rate of increase of mental age and on the age of maturity of intelligence.

(b) *Age-difference.* The age difference is the difference between the mental age as determined by tests and the natural or chronological age. The age difference may be *plus* or *minus*. We are, however, in our present state of knowledge, unable to say whether or not an age difference of —3 in early years is the same as —3 in adolescence. It probably is not.

(c) *Intelligence Quotient* (*I.Q.*). The intelligence quotient is the ratio of mental age to chronological age. It, therefore, expresses a degree of brightness.

$$\text{I.Q.} = \frac{\text{M.A.}}{\text{C.A.}} \times 100.$$

Terman has presented evidence which shows: (i) that the I.Q's. of a large group of unselected people are distributed according to the normal surface of frequency; (ii) that the range of the middle fifty per cent. of the group lies between 93 and 108; and (iii) that the I.Q. is practically constant in any individual between five and fourteen years and probably throughout the whole of life. Since mental age is meaningless considered apart from chronological age, Terman believes that in the I.Q. we have the best expression of a child's intelligence status.

Further information is needed before we can regard the I.Q. as constant throughout life. Mental age, on which the I.Q. depends, is a score made in an examination. Fatigue and the state of health must certainly affect it, although the measurable effects may conceivably be so small as to be negligible. All that we can say at present with any degree of certainty is that the I.Q. seems to be fairly constant during the elementary school period. Such data as we have regarding the I.Q.'s of High School pupils seem to point to a diminishing I.Q. during adolescence.

(d) *Coefficient of Intelligence* (C.I.). The coefficient of intelligence is the ratio of an individual's point-scale score to the expected score or norm.

$$C.I. = \frac{\text{Score made in point-scale test.}}{\text{Median score for age.}}$$

The point-scale score was devised by Yerkes because of his objections to the 'all-or-none' method of scoring used in the Terman revision. An answer that was 90% correct frequently counts no more than one that is only 10% correct. Yerkes, therefore, attempted to define degrees of performance in each of the tests and to determine the grade of intelligence from the degree of performance achieved. The intention of the method if admirable. Yerkes failed, however, in fixing somewhat arbitrarily the values to be attached to each of the Binet tests. An ideal point-scale necessitates the fixing of the point-scores from experimental data.

The I.Q. and C.I. are practically the same for each individual; they really measure the same thing.

(e) *Index of Brightness* (*I.B.*) This index introduced by Otis is a refinement over the I.Q. In his Group Intelligence Scale the total score is obtained by adding the points scored in each of the tests. "A child who exceeds just one-half of the children of his age in intelligence and whose score is, therefore, just equal to the norm for that age is considered just normal. If a pupil obtains a score which is 25 points above the norm for his age, we may say that he has an *increment of score* of 25 points, and if his score falls short of the norm by 15 points we may say that he has a decrement of score of 15 points. Either the increment of score or the decrement of score is a deviation from the norm."

The I.B. of a perfectly normal individual is taken as 100. All other I.B's. are found either by adding the increment of score to, or subtracting the decrement of score from, 100. An example will make the situation clearer. Suppose that a child of 14 makes a score of 125 in the advanced examination. According to the Tables a child of 14 should normally make a score of 112. His increment of score is 13. His I.B., therefore, is 100 plus 13—113.

This method of expressing the results of the measurement of intelligence was necessitated by the fact that the distribution of scores at the various age levels in the Otis tests are of the same degree of variability, whereas with the use of the Binet Scale the distribution of mental ages of the lower age groups are appreciably narrower than the distributions of mental ages of the upper age groups. It is possible, however, by means of a little statistical juggling to convert I.B's. into I.Q's. And for the majority of people the I.Q's. are easier to understand.

THE PHYSICIAN'S RESPONSIBILITY IN CONNECTION WITH INSANE AND THEIR COMMITTAL TO HOSPITAL, TOGETHER WITH SUGGESTIONS FOR EXAMINATION OF A PATIENT

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TO the physician in general practice who sees only an occasional mental patient the question of his responsibilities to the patient, the friends and the public is often an enigma and one which I am sure he will be only too glad to discuss.

The enactment of Lunacy Laws is probably one of the earliest pieces of social legislation with which the physician came more or less directly in contact, but today he has in addition Workmen's Compensation Acts, Venereal Disease Acts, Vital Statistics Acts and what not others to comply with until it is little wonder if he is not confused by or neglects some of the many legal details demanding his attention.

The legal obligations of the physician under the Lunacy Act are not extensive or arduous and do not call upon him to make a diagnosis of the type of insanity present, nor in fact, to assume the responsibility of saying whether the patient should go to a hospital or not. He is simply expected to prepare a certificate—in Form B, schedule to the Act—in which he states that he believes the patient to be insane for reasons which he is asked to set out in the certificate. Further, the physician need have no fear of legal action as a result of his issuing a certificate, for the lunacy law of this province especially provides that he is not in any respect liable for this certificate of his opinion, if he has acted in good faith and with reasonable care(Sec. 51).

The responsibility for the final disposal of the patient rests solely upon the magistrate or other person competent to commit to a mental hospital and the physician has not a thing to say as to whether a magistrate shall commit or not. As a matter of fact, in practice, the magistrate is largely governed in his action by the certificates placed before him but it is not in any way incumbent upon him to accept the opinions set forth in the certificates.

This is the only legal responsibility of the physician but what of his moral responsibility to his patient, the friends and the public? Relatives of the insane usually look to the physician to direct them as to procedure in gaining the admission of a patient to the hospital and. unfortunately, it happens only too often that the physician either through carelessness or ignorance, misdirects these friends and causes them no end of incon-

venience and annoyance by directing them to the hospital with the "doctor's papers" as all that is necessary. The result, as I have said, is annoyance and inconvenience for friends, often unnecessary discomfort to the patient and delay in beginning of treatment, for a patient cannot be received in a mental hospital without a committal order properly made out and signed and the certificates upon which that order is based. The officers of the hospital have no powers of discretion in this matter and should they oblige fellow physicians by receiving improperly committed patients, do so at the risk of serious legal consequences to the hospital and themselves. Therefore, I would impress upon you the fact that to preserve your own dignity and reputation for infallible and boundless knowledge of all things with your clientele, as well as to facilitate the admission and early treatment of the patient you should know, always remember and never fail to see that four properly executed certificates accompany your patient to the mental hospital if you have undertaken to advise the procedure necessary to gain admission. These certificates are: Form A, the Order of Committal from a magistrate. Form B, from each of two duly qualified medical practitioners in the actual practice of their profession who are not partners nor relatives of the patient and, equally important but frequently very scantily prepared, a certificate in form C, from the relative, guardian or police requesting the admission of the patient.

Gentlemen allow the number four to become indellibly fixed in your mind and inseparably associated with the idea of procedure in the committal of the insane.

Again of the physician's moral responsibility to the public or the community. What physician in practice does not know of at least one insane person, potentially dangerous, for all insane are such, either uncared for entirely through superstition, fear or ignorance of relatives,or so badly and improperly cared for that he is rapidly losing or has already lost all chance of recovering mental health and is a source of danger to himself and all those with whom he is associated. You will say if friends object I can do nothing. I cannot agree with you. Where friends are intelligent you can educate them to the point of believing that the patient's best chance for recovery is in the hospital, that the least chance for serious accident either to himself or those in contact with him makes it essential for him to go to hospital and above all to drive away their fears handed down through the centuries that patients are ill-treated, neglected and abused. Of the relatives who are not intelligent you have still the course open of reporting the case to and placing your certificate in the hands of the police, who will act. In this case you have only to decide, which is more important, your duty to the patient and society in general with the risk of a suicide, a homicide, or what not removed, or your duty to yourself in retaining the

esteem of persons whose lack of intelligence must or should force one to wonder if it is worth retaining. This question, gentlemen, is an individual problem and one which we are at liberty to decide for ourselves. There is no law compelling the reporting of insane to any authority but to my mind there should be such a law. I feel that one must be forced to this conclusion if he heeds the almost daily reports of deaths, murders and disasters directly attributed to insane persons who have not been cared for as they should have been.

The question of how to examine a patient for insanity is one which often arises in the mind of the physician. There is a subtle something developed in a person by practice and association with certain conditions which enables him to gain more from an examination than one less practised. As the surgeon can visualize an abdomen or the physician a heart, so the psychiatrist visualizes the ensemble of a mind and as a result of his experience is able to give diagnosis and prognosis in cases which to the inexperienced seem only a confused jumble of silly sentences and acts. The keynote of all successful examinations in any sphere of medicine is thoroughness and system, bringing out each phase and feature of the case clearly and distinctly, that none may be overlooked in drawing conclusions.

You all know full well the overwhelming importance of the history in physical illness, it is equally important in mental illness and as in one so in the other is the logical place to begin the examination. With the mental patient this not only supplies the examiner with information of inestimable value, but serves to gain the confidence of the patient, to put him at ease, and to make the intricate paths of his mind much more readily accessible to the examiner.

The family history, a matter relative to the patient, but not one sufficiently personal to embarrass him is the best and easiest place to begin, and where in the whole sphere of medicine is the family history of more importance than in mental diseases. Here you are at once gaining information concerning possible etiological factors, at the same time gaining the confidence of your patient and putting him at ease. Begin with the father, learn whether he is alive or dead, his occupation, his health, his disposition, the kind of parent he was. If he is dead, at what age did he die, of what cause, was he ill a long or short time and a quite important question indeed, did he die at home. In answer to this question one will quite occasionally learn that the father or some other member of the family died in a mental hospital when the patient never had any intention of admitting that there ever was such a thing as insanity in the family. As with the father so should each member of the family be inquired about

carefully, and in detail, and lateral branches of both paternal and maternal sides of the family should be investigated. This is often a tedious proceeding but the results entirely justify the time and patience required and enables the examiner to picture to himself the roots from which the mind under examination sprang in a way that cannot be accomplished by any other means.

By the time the examiner has exhausted the family history, if he has done so skilfully at all, he will be quite sufficiently established in his patient's confidence to inquire into his more intimate life and obtain the personal history. Here again he should begin at the beginning and learn the place and date of birth, for by specific and detail questions we learn many things of the patient's mind which I shall mention later. We inquire of any circumstances connected with his birth which the patient may have heard, such as whether it was a natural birth or, were instruments used. Here at the beginning of life is a possible source of injury which may have resulted in interference with mental health; at what age did teeth erupt, at what age did he learn to walk, to talk. These may seem irrelevant to mental disease but do they not at once tell us whether development was normal, delayed or precocious. We proceed to inquire for illnesses of infancy and childhood, for convulsions, seizures or other symptoms which may indicate disease or irritation of the nervous system, or for illnesses that may have affected the mental development by toxemia.

Following the developing child we inquire at what age he started school. If not until eight, ten or twelve, what delayed him. Here we may learn of an illness until then forgotten, or learn of environment which will throw very important illumination upon the morbid mental processes confronting us. We inquire of his progress at school, how long did he continue and was attendance regular. From this information we are able to judge of the receptiveness of the developing mind; of his powers of assimilating and retaining knowledge and as the history progresses, to judge of his ability to apply the knowledge so obtained.

When the history has brought the patient to the age of fourteen or fifteen the question of sexual development is inquired into with the idea of learning of unusual sexual irritations or excitements; of masturbation or other practices frequently developed at this period of life which may indicate a neurotic or nervous temperament which is so frequently the fertile soil for the later development of mental disease. With the female patient we learn at what age menstruation was established, with what difficulties, and its subsequent course. Pregnancies, their course and termination, miscarriages and abortions are all carefully inquired about and noted, for this information certainly is important in revealing the physical health of the patient and so undoubtedly reveals valuable information which may have a direct bearing on the mental condition present.

While on this subject the matter of venereal disease is best investigated and should never be forgotten, for the history of syphilis may at once give us the key to the patient's illness or the worry over an old attack of gonorrhea may at once explain many of the mental symptoms present and not formerly understood. It is well too, to bear in mind the Frendian theories and be on the watch for any suggestion of sexual incidents of adolesence which may have caused subconscious fears and suppresion of normal mental processes. When this subject has been exhausted to the satisfaction of the examiner he should next ask the patient, what was the first job he ever had? How did he happen to take it? Did he like the work? How long did he keep the position. Why did he change and so on through out his whole career. By these questions we learn many things. We learn of the patient's fixity and steadfastness or irresponsible and roving tendencies; we may unexpectedly uncover the beginning of persecutory ideas which have driven him from place to place and position to position and which have eventually crystallized into the systematized delusions of persecution which we find present but have heretofore only suspected. We at once are able to form a more accurate conception of the process by which these delusions have been built up, their degree of fixity in a word are learning much of the patient's insight into his own condition.

Physical illnesses which have occurred during the patient's lifetime should be investigated. What were they? of what duration? and did they leave any effects noticeable to the patient?

We then proceed to investigate the patient's social state. Is he married or single? When, on what date was he married? The answer tells at once something of the patient's memory and his attention to details as well as giving us some information regarding his conception of the importance of this event in his life. We inquire of his family relations, have they been smooth and uneventful, or troublesome? What seemed to be at the bottom of the troubles and how were they adjusted? Are there children? are they all living and healthy?

The patient's mental make-up can be judged to a degree by an examination of the subject of hobbies or special interests in some particular matter, or is life to him merely a succession of days of toil and drudgery because it is necessary for existence.

The examiner now has a fairly intimate knowledge of his patient; his temperament and habits and is in a good position to judge the circumstances which caused the examination. If it was solicited by the patient the complaints will be taken up one by one and inquired into. If the patient complains of peculiar odors, that his food tastes strangely and he has brought a sample for analysis, one would think at once of the presence of hallucinations and proceed to investigate the frequency of the occur-

rence, the reasons the patient may attribute for them and so on, until the examiner is able to satisfy himself as to whether the complaints are real or the products of a diseased mind expressed by hallucinations. In the same way the delusional field must be investigated. Why does the patient say that he is being followed, or persecuted by this organization or that person, or that this event or that was directly connected with himself. The possibility or probability oft he events described together with the reasoning employed by the patient, the conclusions he comes to and the possibility of a mistaken judgment on his part must all be taken into consideration, for the delusional insane admit no possible error in their reasoning or conclusions. On the other hand if the examination is being made as a result of a request by friends or police the patient can be approached by obtaining from him an explanation of the circumstances of which friends complain or the conduct which has caused his arrest. In these cases the attitude of the patient will be quite different from that of the patient who voluntarily seeks assistance from the physician and frequently requires much patience and skilful questioning before the patient can be led into a discussion of the trouble and a revelation of his mental processes.

The information now in the possession of the examiner must needs be sorted out and classified to enable him to come to conclusions regarding the mental condition of the patient. This can best be done in two groups. A subjective group, comprising information gathered by questioning and an objective group, the information gained by observation of the patient during the examination. The subjective group can be subdivided into the following:- (i) Delusional Trends ; are delusions present, what are their character? Are they systematized and fixed, or fragmentary and fleeting? (2) Hallucinatory Trends; are hallucinations present? Which of the senses are involved? (3) Degree of Insight; Does the patient recognize any possibility of mental illness or the existence of delusional states or hallucinations Is he able to adjust his ideas or correctly interpret his sensations; to recognize his emotional states, memory defects, etc., and adjust himself or not? In other words, does he possess insight into his condition, or is it partially or totally gone?. (4) Memory:— You will remember that questions were to be specific and answers definite. This was for the particular purpose of memory tests and to estimate the impressionability of the patient's mind. The memory for detail, for remote and recent events is noted in this way and the possibility of a fictitious memory where elaborate detail is supplied, must always be considered.

(5) Orientation:—Has the patient been able to comprehend and express proper relations of time, place and person? Does he recognize the proper season of the year, day of the week, month, etc.? Does he

see in those about him persons of the past or relatives, or is he able to place them properly? Does he know that he is in hospital, home or gaol or does he believe himself in some distant city or great palace?

Objective symptoms.

Here is grouped the information gathered by observing the patient during the examination and quite frequently questions are asked with the definite intention of bringing out these features. For instance, one may deliberately ask questions to excite emotions of anger, laughter or tears in order to judge whether the mental reactions in this field approach normal or not. The objective symptoms can be classified under the following headings:

1. ATTITUDE

What has been the patient's attitude toward his environment and the examiner? Is he suspicious and resentful or does he co-operate readily and endeavor to assist in the examination?

2. MANNER

Is the patient polite, respectful and friendly, or is there affectation, insolence, aggressiveness or indifference? Are there distinct mannerisms present.

3. ATTENTION

Is it easy or difficult to gain the patient's attention to the subject under discussion; to hold it there and get logical and specific replies, or does he reply partially or entirely at random? Is he able to fix or retain attention, or is it readily distracted by a passing bird, a whistle or some object about the room? It is quite common to find the attention very easily but very poorly retained. This is splendidly exemplified in the manic types of the Manic Depressive psychosis where the actual press of ideas makes it quite impossible for the patient to fix his attention more than momentarily on any subject.

4. RETENTION

Can the patient retain facts stated to him previously or can he give the substance of a paragraph read to him or does his mind fail to register these matters and pass them by without receiving any impression?

5. EMOTIONAL STATES

Is the patient at ease or nervous and restless, does he cry, moan, laugh, shout or sing? Does he show proper emotional balance, or does he cry when he should be cheerful and laugh when he should be serious or even sad?

6. MENTAL GRASP

It finally is necessary to form an opinion of the mental developments or mental grasp of the patient. In the absence of definite test scales and long and careful examination, one forms his opinion from all previous data obtained, and must adjust his conclusions of the patient's mental

condition accordingly as it is quite obvious that a mind with little mental grasp or, in other words, a mental deficient might easily be responsible for acts which superficially would appear insane but which, as a matter of fact, are clearly shown to be the results of mental processes or their absence in a shallow, under-developed or deficient mentality.

It is by such a process that the soundness or otherwise of the mind must be judged and I feel quite sure that any physician, whether experienced in psychiatry or not who, will follow out the examination as suggested here will make very few errors in issuing or refusing certificates of insanity.

"PREVENTION OF MENTAL BREAKDOWN"

BY C. A. BARAGAR, M.D.

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IN Manitoba at the present time there are over twelve hundred patients in the three principal mental hospitals, demanding from the province annually for maintenance alone an expenditure of about half a million dollars. There is also the loss due to the withdrawal of a large number of producers. But the economic burden is not the only side of the question. There is the human side, the mental distress of those unfortunates whose reason has proved unequal to the strain of modern life, as well as the suffering of their relatives. Outside these Institutions there is a great host of men and women, who for one reason or another, are unable to adjust themselves properly and who therefore are in reality more or less of a burden on the community. These are the borderline cases who have not and may never reach the stage where it is necessary to deprive them of their liberty. Yet they are mentally ill as truly as many of the institutional cases. The prevention, therefore, of these conditions of mental breakdown or maladjustment is a problem of great extent and extreme importance.

Absolute prevention is dependent upon full knowledge and absolute control of the causes of mental breakdown. This is beyond our power, but much is known of the causes and over these we have, or may have, some control and much in the way of prevention may be accomplished by a judicious exercise of this knowledge and power.

Mental breakdowns are due to physical disease, often involving the nervous system directly or indirectly; to bad heredity and to faulty development together with the mental stress and strains of life. These latter are bound to occur in any civilized community, are likely to vary in proportion to the responsibility thrust upon the individual and are due to the complexity of life. As it is not desirable that individual responsibilities be lessened generally, but rather that the resistance of the individual in general be increased, the reduction of these mental stresses will not be considered as a means of prevention except in the case of those unfortunate individuals known to have a mental equipment of low resistance.

PREVENTION AND PHYSICAL CAUSES

Various acute and chronic infections, organic diseases, head in-

juries, senile and arteriosclerotic changes, are known to give rise to or strongly predispose to mental disease. Present investigations would indicate that endocrine disturbances play a larger part in mental disease than was formerly thought. On the other hand the mental state profoundly influences the endocrine balance and hence the cause-effect relations of this whole question are still obscure. We have little or no control over some of these medical conditions such as senility, and hence little can be done with such causes. But the prevention of the causal condition in general results in the prevention of the mental sequela and is therefore to be dealt with as a general medical problem.

Two causes, however, on account of their social importance and as both are preventable, require special consideration. They are alcohol and syphilis. William A. White states that they together "are responsible for fully 20% of the certifiable psychoses in males at least." Again referring to alcohol, he says: "Recent statistics would indicate that 12% of the insane confined in public institutions in the United States are there because of its influence, direct or indirect."[2] In some hospitals receiving patients from large cities, the proportion of syphilitic psychoses among first admissions is as high as 13%.[3] In Canada generally, because of our smaller cities and large urban population, the percentage falls much below these figures. During the last nine years in the Brandon Hospital for Mental Diseases, 8.9% of the deaths were due to general paralysis of the insane, but so far as can be ascertained from records not over 1.7% of the admissions were cases of this disease.

The methods of combatting venereal disease and alcoholism have, during the past three or four years, received widespread attention in both the medical and public press and need only be mentioned. The prevention of syphilis depends upon the teaching of young men and young women the advantage and necessity of living clean, continent lives, sublimating adequately sexual energies, and constantly remembering the duty they owe themselves, their fellowmen and posterity. Where these powerful emotions cannot be turned into useful channels, thorough preventive and prophylactic precautions should be taken. Finally early, thorough and prolonged treatment is necessary for those who have been infected. Farquhar Buzzard says that treatment should continue intermittently for the rest of the patient's life.

The experience of the war years may be regarded as pointing the way to the prevention of the psychoses due to alcohol. During the year 1916 and since there has been a marked falling off in the admissions to the Brandon Hospital for Mental Diseases. This has been attributed in part to the diminution in the use of alcohol as a result of war measures. Only two cases of alcoholic psychoses were admitted to this hospital during 1920. The contrast between this and the corresponding admis-

sions in a country where the same restrictions regarding alcohol do not obtain is very striking.

Kirby has shown that in the New York State Hospitals there has been a falling off of cases of Alcoholic Psychoses among the first admissions from 10.7% in 1909 to 1.8% in 1920. He indicates that this is due to the great trend of public opinion against the use of alcohol that has been growing during the last fifteen years, and which has culminated in prohibition measures.

Certainly, as far as the problems of mental disease are concerned, prohibition deserves an extended trial.

Faulty Heredity

Faulty or tainted heredity has been variously regarded as bearing an important causal relation to mental disease in from 60% to 70% of cases admitted to mental hospitals. In these conclusions true hereditary tendencies and developmental factors have doubtless not been fully differentiated. Three groups of factors are likely to be confused: Tainted heredity in the true sense, that is, abnormal tendencies due to defective germ plasm; germ plasm occurring at the time of, just previous to, or after conception, through alcoholism or the toxic effects of chronic debilitating disease; and developmental factors, or as Adolph Meyers expresses it: "Early growth and nutrition" on the physical side, and "Training and habit formation" on the mental side.

Marriage

Prevention in relation to heredity is largely a question of marriage. Marriage is a much more serious question for future generations than those contemplating it appear to recognize. The personal or selfish aspect is unduly emphasized. The raison d'etre of marriage is the propagation of the species, and young men and women should have their ideals so developed that only mates healthy in mind and body would be normally chosen. While the ideal is of course that both individuals should be healthy mentally and physically, that is seldom attainable, and in reality the limits of marriageability are not so narrow as many eugenists would have us believe. It has been found that the prospect of healthy progeny from the mating of tainted with untainted or even with slightly tainted stock is good, and the number of those mentally unstable is much less than the number of those mentally sound and that the value of the latter to the world much outweighs the loss on account of the care and protection required by the former.

Individual tendencies depend upon hereditary, conceptional and

developmental influences and where there are slightly unfavourable hereditary influences they may be neutralized to some extent by taking special precautions to provide good conceptional and developmental influences. Where these unfavourable conditions obtain, therefore, the facts should be frankly faced by those contemplating matrimony, so that special attention may be directed to the other factors.

It is difficult to formulate sounder advice than that outlined by Adolph Meyers.[5] (The reader is referred to Meyers' article for a full discussion.) He says that if two individuals "can feel and give to their own sense and conscience reasonable assurance of giving a family of four children a wholesome, healthy environment and education, then even tainted persons might be allowed to marry, especially into untainted stock." He further adds: "If unfavourable heredity should crop out, it would be highly probable that the healthy and capable brothers and sisters would be able to assure the protection and care of the problematic abnormal individual.

From a practical standpoint one may say that marriage should be prohibited:

1. Where either the man or the woman has had a mental breakdown.
2. Where one or both have marked psychopathic tendencies.
3. In the case of all mental defectives, except the higher grades of the moron class, and even then when psychopathic tendencies are present.

One is sometimes asked if a marriage without children is permissible, that is, where conception is prevented by continence or contraceptive measures. In all cases where one only of the contracting parties is abnormal such a marriage should be forbidden. It is unjust to the normal individual. Theoretically, in certain circumstances it might be permitted between two psychopathic individuals or where the stock was tainted on both sides, but then only with full knowledge of the responsibilities involved. Where one of a couple already married has had a breakdown no subsequent conceptions should be allowed to take place.

A compulsory medical examination of both parties before marriage has been advocated, and, I believe, has actually been provided for by statute in certain States, but is of doubtful value, as unscrupulous examiners could always be found to sign the necessary documents. A simple physical examination is of no great value in itself, except to rule out active venereal disease. A thorough evaluation by a medical expert, voluntarily obtained by the contracting parties and involving a consideration of ancestry, mental attributes and physical condition would, however, be of the greatest value. It would enable the two individuals to assume their new responsibilities with important knowledge of possible

facts likely to affect adversely the resulting progeny and thus to be prepared to neutralize, in so far as possible, undesirable tendencies.

Sterilization

Sterilization of those who have had a mental breakdown and of mental defectives has been frequently mooted, but is of doubtful value and in many cases would not be advisable. It might with wisdom be recommended in certain individuals, mainly of the feebleminded groups, viz.: 1. All imbeciles and some low grade morons. 2. All morons with antisocial or marked sexual tendencies. 3. A few psychopathic individuals especially those with hypersexual tendencies.

Developmental Considerations

So important are developmental influences, that is, early growth and nutrition and training and habit formation, that William A. White has referred to childhood as "The Golden Period of Mental Hygiene." Even with a tainted heredity much can be done during this impressionable period to neutralize unfavourable tendencies and to create healthy habits of thought. Like Demosthenes, the individual may not only surmount his obstacles but actually achieve greater success because of them.

The moulding of the child's environment should begin before birth, and even before conception, in the teaching of mothercraft and fathercraft to young women and young men, so that they may be prepared to intelligently assume the responsibilities of parenthood. The importance of good health on the parents at the time of conception should be emphasized.

The importance of attending to the child's physical health is generally appreciated, but not so the importance of ensuring good mental habits.

Mentally, each individual may be said to have inherited three fundamental instincts or emotions which are the mainsprings of life, the forces which carry the individual through the world. They are: The self-preservation instinct, the race-preservation instinct, and the herd instinct. Manifestations of the first are hunger and fear. It compels the individual to provide for his nutrition and to protect himself from his environment. It is pre-eminently selfish and direct in its operation. The second, in its narrow sense, is manifested by the desire for sexual gratification; in its wider sense it gives rise to the great emotion of maternal and paternal love, filial love and friendship. It is essentially indirect and altruistic. The third may be regarded as a derivative of the other two emotions and enables us to live in communities as social

beings. These emotions demand satisfaction and their energies ordinarily find outlet in a healthy way directly, or indirectly by sublimation. They will otherwise be repressed and hence find outlet in unhealthy ways. The great purpose of training and habit formation, that is, of education in a broad sense, is to enable the individual to control these emotions wisely and to use their vast energies in a healthy way, to enable him to boldly face and efficiently control his environment and not to allow his energies to be dissipated in useless fantasy.

The great laboratory for this developmental work lies in the home. Nowhere else does one find work done from truly altruistic motives. There it is performed in response to the dictates of the race-preservation instinct. In general, work is elsewhere done by virtue of the self-preservation instinct which is essentially selfish. Therefore, any action of the State that transfers fundamental responsibilities from the home to the state, or reduces the influence of the home, is pernicious. Therein lies the fallacy of the theories of such socialists as Ellen Keyes who preach state reared children. No matter how lowly or how bad the home, there is almost invariably a spark of mother love to exert its influence on the young from birth onward. Anything the state can do to shield that spark and to fan it into a flame is of value. The preservation of the home is of fundamental importance to the race.

Our school system in the past has emphasized intellectual development and has shown a tendency to rob the home of some of its importance. That attitude is changing to some extent, and now the school is trying to supplement and not supplant the home. By the development of playground facilities and of manual training and domestic science, it is emphasizing the emotional and volitional as well as the intellectual. Children can learn to control themselves more by surmounting physical difficulties than by achieving intellectual successes. The young man or young woman who has learned to play a game cleanly, honestly, and to the best of his ability is likely to play the game of life in the same way.

The training of a child should begin the day of its birth. The unborn child may be said to be omnipotent. Everything is done for it and all its desires are satisfied. The infant is less so, but still its exertions are confined to breathing, suckling, defaction and urination, which are semi-automatic acts. Later, it learns to cry when it is hungry and then to reach out or creep toward and grasp whatever it wants. It is learning to overcome its environment. Year after year the individual's desires become more numerous and more complex and the satisfaction of these desires more difficult to obtain and more removed in point of time until we find the adult striving for the satisfaction of his own needs and desires and for those of his family, a satisfaction that may not be attainable for years, or that may even be problematical.

At each stage of development a more efficient mode of reaction is normally adopted. But abnormally less efficient modes may become fixed and carried on. This produces maladjustment to environment and may be one of the factors causing a mental breakdown in adult years. For example, we find a spoiled child flying into a temper and crying for things he should be striving for; and we find the adult wasting his energies in useless fantasy and sensitive seclusion instead of actively and fearlessly forcing his environment to yield him the reward he desires.

It is the duty of parents and others to foster in children correct mental habits so that these developmental milestones may be successfully passed. The more youthful methods of adjustment must be discarded at the proper time for more efficient and mature. In this way the young man and the young woman may be prepared for the struggle of life with the proper mental equipment for adequate adjustment.

SPECIAL PROBLEMS

The developmental period is not without its special problems, with which all having the responsibility of children should be familiar. There is first the abnormal child, the neurotic or psychopathic child. He is often said to be "highly strung." He may be timid, sensitive and seclusive. He may be excitable, violent tempered, or subject to terrifying dreams. Such a child requires exceptional care and deep sympathy. It is essential that parents frankly admit abnormal tendencies. We so often try to conceal even from ourselves these tendencies in our own children. This attitude is an unfortunate attitude and only robs the child of much needed assistance. In such a case the objective interests must be developed and the physical rather than the intellectual activities emphasized. For him outdoor life, outdoor games and outdoor work are essential. These children are often extremely sensitive, especially to ridicule and censure, and tend to become morbidly seclusive. Intelligent sympathy and encouragement is necessary to counteract this dangerous tendency. With care not only can the danger of a subsequent mental breakdown be avoided, but frequently this type of child may be developed into the highest type of citizen.

Certain developmental periods require special care. They are the periods of infancy, of puberty and adolescence. The importance of laying good foundations in infancy has already been emphasized.

Puberty and early adolescence is a period of many dangerous reefs. During it various conflicts arise between the established ideals and the newly awakened sexual emotions. Both boys and girls require special guidance. The interest should be largely objective. Hard Study should be avoided, especially in girls who seem apt to become unduly ambitious

at this time. Excessive fantasy-habits during this period are easily formed. Day dreaming is especially characteristic of this period and is, within limits, normal, but should be outgrown to a great extent as adolescence progresses. If the individual is seclusive, and healthy external interests have not been developed, this normal reaction of youth becomes fixed as a bad habit in the adult and prevents effective adjustment.

The third great problem is the teaching of the knowledge and meaning of sex. Sexual activities and interests are the manifestations of one of the fundamental emotions, an emotion that is bound to have some outlet direct or indirect, normal or abnormal. About it occur many conflicts and, without care, many dangerous repressions. All are agreed that young men and women should possess some knowledge of their instinctive natures, and that this knowledge should come through clean channels. The question is, when shall the child be taught and by whom?

We are told by some educators that it may be taught in school and if taught as any other branch of knowledge no undue curiosity will be aroused. They tell us that the morbid curiosity is due to our conspiracy of silence. This, I believe to be incorrect. Sexual curiosity is no ordinary curiosity. It is an interest surcharged with emotion dependent on the activities of an instinct no less powerful than the self-preservation instinct, and because less direct in its action more powerful in its interest. No matter when or where sex knowledge is taught one runs the risk of awakening untimely emotions and fancies, or of overstimulating those awakened. As the child's interest normally and spontaneously awakens, so should his desire for knowledge be slowly and tactfully satisfied. In other words, when he asks questions these may be simply and frankly answered in so far as his understanding will permit.

Under these conditions none but the parents are in a position to impart information regarding sex, and it is from the parents that it should always come. In cases where they feel themselves incompetent, they might presumably refer the child to some trusted and respected friend, such as, physician, teacher or other person. In the school may be taught the facts of biology with reference to plants and lower animals, but not all the facts of human physiology. Moreover, the child must have received the rudiments of his knowledge before he is old enough to study biology in school, or his playmates will have forestalled the teacher.

Once well past the age of puberty, young men and young women may be taught the facts of sex and the principles of fathercraft and mothercraft with profit by special teachers in our high schools, especially if the elementary facts have been properly learned in childhood.

Developmentally then the prevention of a mental breakdown depends on the development of a healthy body and a healthy mind, i.e.,

the rearing and training of individuals who have learned to control themselves and their environment.

IMMIGRATION

From a national and social standpoint the prevention of mental disease involves the exclusion of immigrants whose capacity for mental adjustment is low. During the last nine years 65.05% of patients admitted to the Brandon Hospital for Mental Diseases were born outside of Canada, though at the time of the last census (1911) only 41.87% of the population of Manitoba were born outside of Canada. From 1912 to 1915, the proportion of non-Canadian born was almost constant, at about 70%. Since 1916, the cessation of immigration due to the War has had an effect, and the percentage of foreign born admitted has steadily decreased, though it is even yet too high. The conclusions are obvious. Stringent regulations are required to prevent those physically and mentally unfit from entering or becoming citizens of Canada.

CONCLUSION

The prevention of mental breakdown, so far as our present knowledge and control permits, is to be attained by active steps in four main directions.

1. *Medical and Social.* By the adequate prevention and treatment of alcoholism and syphilis.

2. *Heredity.* By steps to prevent the bringing into the world of individuals likely to have a mental breakdown. This may be attained to some extent by contraceptive measures, and possibly, in certain cases, by sterilization, but chiefly by building up high social ideals and a strong enlightened public opinion, and by emphasizing the true object of matrimony.

3. *Development.* Ensure for each child a healthy body. Develop in each individual healthy habits of thought and objective interests, taking care that more youthful or inefficient modes of adjustment do not become fixed. Balance properly the child's physical and mental activities. Face frankly and take steps to counteract abnormal tendencies in the child. Open out the child with a sensitive and "shut-in" personality. Teach the psychopathic or neurotic child to control himself. Guide the boy and the girl through the troublesome period of puberty. Sex knowledge should be imparted to the child in the home by the parents as it is spontaneously demanded.

4. *Immigration.* Wise and well enforced immigration laws are required.

To-day, as was the case with Tuberculosis twenty years ago, the problems of mental disease are viewed with pessimism by the majority of the medical profession, but this attitude is changing and within a few years will, as in the case of tuberculosis, be replaced by a healthy optimism. In both tuberculosis and mental disease, however, prevention is better than cure.

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THE ORGANIZATION OF STATE INSTITUTIONS FOR FEEBLE-MINDED IN THE UNITED STATES

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THE following presentation is based on a questionnaire circulated in 1919 and the percentages derived are subject to errors inherent to the questionnaire method. Furthermore conditions in State Institutions for the Feebleminded are changing, and it is possible that some of the percentages that I shall give do not express exact situations to-day.

The questions submitted were as follows:

Institution.....Date.....

1. Annual admission rate?.....Any restriction as to age?.....
   Do you admit under judicial commitment?.....What per cent?.....
2. Daily average census.....
3. Do you admit both sexes?.....If not, which one?.....
4. Do you admit epileptics?.....What per cent?.....
5. Is the executive head of your institution a physician or a layman?.....
6. How is he appointed (a) by board of trustees, (b) state board of control, (c) governor, (d) from civil service, (e) or other method?.....
7. Does he have direct charge of the "maintenance and operation of the plant"?.....
8. If so, what proportion of his executive day is thus used?.....
9. Number of resident physicians.....
10. Number of resident or non-resident psychologists.....
11. Number of resident or non-resident pathologists.....
12. Number of physicians on visiting or consulting staff.....
13. Do you have staff conferences for consideration of cases?.....
    If so, how often?.....Attended by.....
14. Do you maintain a dispensary or out-patient clinic?.....
15. Does your institution serve a certain district for consultation, examination and psychometric testing?.....
16. Do you have a psychological laboratory?.....
17. Do you have a pathological laboratory?.....
18. Do you have a clinical laboratory?.....
19. Number of autopsies in 1916.....In 1917.....
20. Do you do neuropathology?.....
21. How many social service or field workers have you?.....
    Do they perform after-care, or do they collect history data?.....
22. Do you "place out" cases, in domestic service?.....
    Elsewhere?.....
23. Do you maintain a colony?.....How many?.....
    Population and nature of each?.....
24. Do you operate a training school for attendants (nurses)?.....
    For teachers?.....
25. Indicate the relative importance of pedagogical (training), medical (psychiatric) and custodial care in an institution for the feeble-minded.....

(Read at the 1920 meeting of the American Association for the Study of the Feeble-minded, Cleveland, Ohio.)

26. Is your scholastic work a separate department from industrial?.....
Separate heads for these departments?.....
Under whom is the "sense training"?.....
27. Do you have a scientific library?.....
Approximate number of volumes?.....
28. Number of scientific periodicals received.....
29. What equipment have you for special medical treatment (surgical, hydrotherapeutic, syphilotherapeutic, etc.).....
30. Is your institution used for teaching purposes (medical instruction, etc.)?.....
31. Do you have a barred or closed ward or building for troublesome or delinquent cases?.....

There were 41 state institutions for the feebleminded in the United States at the time of the survey and returns were obtained from 33.

The replies to the 31 questions are analyzed and summarized in the following paragraphs.

Size of Institutions. In 32 institutions the number of patients under care varied from 46 to 2,293, with a median of 590. In the upper quartile were eight institutions with an average of 1,700 and in the lower quartile there were five with less than 100. The average for this quartile was 100. It is thus apparent there is wide variation in size of the institutions with a group in the lower quartile very small for State institutions. This fact should be kept in mind in our general findings as well as in our recommendations.

Age. Fourteen or 42% had no restriction for admission; 7 had as lowest limit 5 years or school age, 1 admitted only males between 6 and 16, and another limited all admissions to the span between 5 and 20.

Commitment. Judicial commitment was at least one of the methods of admission in 32 out of 33. The proportion of such admissions varied widely, 14 reporting 100% judicial commitment, the balance ranging from 1 to 99%, with a mean of 25%.

Sexes. Thirty received both sexes, two females only, and one males exclusively.

Epileptics. Twenty-two or 66%, admitted epileptics in proportions varying from 5 to 50% of their total population.

Superintendent. In twenty-seven or 83% the superintendents were physicians. Four had lay superintendents and one of these had dual control.

Method of Selection. In only those instances, was it apparent that Civil Service had any part in the choosing of superintendents. In most cases the selection was made by a board of trustees, managers, or a State Board of Control or Administration.

Distribution of Superintendent's Executive Day. Of the twenty who replied to this question, ten stated that their entire time was occupied

with executive duties involved in the management of the institution, and ten spent at least half the time thus engaged. It was endeavored to bring out how much time the average superintendent devotes to clinical and medical work in contrast to purely administrative duties.

Medical Staff. Eight institutions, or 25% reported no resident physicians. As one of these had a lay superintendent we may infer there was no resident medical service in that institution. These eight institutions were for the most part the smaller ones, but there was one of more than 600 and one of 400 patients.

Nine institutions had only one physician in addition to the superintendent, seven had two physicians, two had three, four had four, and two had five.

Exclusive of superintendents the general average was one physician to about 450 patients.

Pathologists. Twenty-eight, or 85%, reported no pathologists, three had one, and one had two.

Autopsies. Of the twenty-seven answering this question, eighteen reported no autopsies held in 1916-17; in the remaining nine institutions the autopsies varied from 5 to 53 in the two years. The total cases that were sectioned were 233.

Neuropathology. Of the twenty-eight replies, twenty-five reported no neuropathology, two reported such studies were made and one replied that the material was sent to a central laboratory.

Laboratories.

CLINICAL. In thirty institutions, nineteen had no clinical laboratory, and eleven reported some sort of provision.

PATHOLOGICAL. In the same thirty, there were only four pathological laboratories.

PSYCHOLOGICAL. Again in the same group, there were nine psychological laboratories.

Psychologists. Of thirty-two institutions, twenty-two reported no psychologist, eight reported one and one had two.

Pathologists. Of thirty-two replies, twenty-seven had no pathologists, three reported one and one had two.

Consulting Staff. Of thirty-one institutions, seventeen had no consulting staff, the others ranged from a staff of 1 to 27.

Staff Conferences. Sixteen of thirty had no staff conferences, the other twelve were about equally divided into conferences once, twice or three times per week.

Dispensary or Out-Patient Department. Of thirty-one hospitals, twenty-three had no such department.

District Service. Eight reported they served a district for con-

sultation, examination and psychometric testing, and twenty-two exercised no such function.

Social Service. Of thirty-two, twenty-five had no workers in the field in any capacity, three had two, and four had one.

Placed-Out Cases. Of thirty institutions, eight placed out-patients, practically all in domestic service.

Colony Care. Of thirty-one institutions, sixteen reported no colonies, the remaining fifteen had from one to seventeen.

Training Schools.

FOR NURSES OR ATTENDANTS. Six out of thirty had such provision.

FOR TEACHERS. Only one reported affirmatively a summer training course for teachers for special classes.

Libraries. Of thirty institutions, fourteen reported no scientific library. Of those who possessed libraries a wide range in number of volumes was rated, one as low as 12, another 3,600.

Scientific Periodicals. Of twenty-eight institutions, twenty-five were receiving scientific periodicals, varying from 1 to 10 in number.

Barred Wards. Of thirty-two institutions, thirteen reported one or more barred or closed wards for troublesome or delinquent cases.

Clinical Teaching. Of thirty, only seven were used for medical instruction.

Question No. 25 was: "Indicate the relative importance of pedagogical (training) medical (psychiatric) and custodial care in an institution for the feebleminded." My intention was to obtain an expression of opinion as to the relative importance in State institutions of the three general divisions of the service rendered. Only nine attempted a reply; of these, four placed custodial care first, five pedagogical first, seven times medical service was last in importance, and one placed pedagogical last.

Now if I may make a few deductions and suggestions. It is apparent that the State institutions for the feebleminded in the United States are in a developmental or transitional stage. This is evident by the wide variation in organization, equipment and personnel. It is also apparent that too many are simply custodial in function. Furthermore there is evident need of development along all scientific lines. The problem of mental defficiency is a many sided one and the modern State institutions should be a local center able to cope with each of the branches so far involved; medical, psychiatric, psychologic, pedagogic and social, and should serve a certain district of a State or the whole State not only as a respository for cases, but for outpatient and preventive work such as the best type of hospitals for the insane now carry on.

The medical staffs are entirely too small—the ration of 1 to 450 is insufficient to permit any but routine medical or administrative duties.

Larger staffs must be provided to bring institutional work up to standards already set by scientific workers in allied fields. May I quote in this connection some inspiring lines, each of which I would mentally underscore, from a 1915 report of Dr. Geo. F. Edenharter to Board of Trustees of the Central Indiana Hospital for the Insane.

"The State should not yield to any influence or persuasion that would attempt to found a new institution, or a new division for any existing institution for state care or isolation of any class of mental defectives, no matter under what guise or system that does not contemplate, include and provide as an integral and component part of its organization, a complete and competent medical service for continuous medical observation, medical supervision and medical and surgical treatment of all of the individuals committed thereto."

It is rather surprising that 220 autopsies were made on feebleminded in State institutions in 1916-17. One wonders what studies were made on the cases by the 9 institutions reporting them, especially as 25 of 28 institutions stated they did no neuropathology. It would help a long way toward a better understanding of the mental deficiencies if the wealth of material that annually becomes available in institutions could be adequately worked up along the various pathological lines. For complete neuropathological work the solution seems to be state laboratories rather than individual institutional ones.

Private grants or the large foundations have in this field a great opportunity for service in view of existing conditions, their aid really is necessary to inaugurate and foster neuropathological investigation and research on an adequate scale.

Finally may I summarize the foregoing into "fourteen points," based on this questionnaire survey.

1. There should be no restrictions as to age in institutional care. In this respect, age and mental deficiency have no relation. Nor should there be any restriction as to sex.

2. Adequate commitment laws are necessary but the process of commitment should be easy, with a minimum of red tape. Judicial commitment should always be available where required, but should not be the only means of admission to a State Institution.

3. Epilepsy is essentially a different problem and should be cared for in a separate institution.

4. The Superintendent should be a physician and the more training he has in psychiatry, psychology and sociology, the better.

5. The resident medical staff should number at least 1 for every 200 patients.

6. An active consulting or visiting staff is a necessary adjunct.

7. Clinical medicine, pathology and psychology are essentials and

every institution should have the personnel and equipment to carry them on.

8. Arrangements should be made to utilize the pathological material that comes to autopsy.

9. Each institution should be an active center for all that pertains to mental deficiency. This necessitates an outpatient department, travelling or hospital-extension clinic and social service.

10. Placing-out and after-care supervision of paroled cases should be much more developed.

11. Colony care is well established in some states and should also be utilized to a much greater extent.

12. Institutions that are sufficiently large should have training schools for nurses and teachers.

13. The general supervision of the pedagogical work in institutions should be vested in the State Department of Education. This would tend to maintain standards and would also provide means of training teachers for special classes in the public schools.

14. An affiliation or working relation between medical school and institution is of mutual advantage and should be fostered whenever possible.

OUR ATTITUDE TOWARDS THE MENTALLY DISEASED

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BY the introduction of new legislation in regard to the mentally diseased in March, 1919, and the opening of the Psychopathic Hospital, Winnipeg, in October of the same year, the Province of Manitoba made a distinct advance towards the solution of the problem of mental disease. It has been the first province in Canada to respond to an awakened public opinion on these matters by enacting laws which provided for the application of more humane principles in dealing with the insane. By this act the very word "Insane" has been removed from our statutes; we no longer have "Insane Asylums" or even "Insane Hospitals", but "Hospitals for Mental Disease." It may be said that this is but a change of name. A denial of this, were it necessary, does not come under our present subject, but it can be pointed out that even this change of name will promote a more favorable attitude towards those suffering from mental disorder, especially among those people who have been satisfied to use words like "lunacy" and "insanity" as if they were more closely related to criminality than to disease. A more concrete indication of real advancement is that the individual who is mentally diseased may now be accepted for treatment in a hospital without the intervention of the police as was formerly the custom. He may be admitted to the Psychopathic Hospital in the same way as a patient is admitted to any hospital, that is, voluntarily or on the application of friends or relatives. Unfortunately, compulsory admission in certain cases is still necessary and always will be necessary, that society may be safeguarded against those who have undesirable tendencies with an inability to realize that they are victims of mental disease. However, it is apparent that the trend of public opinion is towards greater consideration for the feelings of the patient and less stringency in the interference with his individual rights. The Golden Rule, ever our guide in fulfilling "our duty towards our neighbor" must prevail in our dealings with the insane almost as fully as with the sane, and public opinion, as reflected in the Law, has come to recognize this.

What has brought about this advance, this more favorable attitude towards the mentally diseased? Evidently a wider knowledge as to the nature of the underlying causes. In the past the examples of barbarism in the treatment of the insane have taken place where gross ignorance prevailed as to the nature of the ailment. The mediaeval diagnosis was that the unhappy victim was "possessed of a devil", and the treatment

prescribed and summarily carried out was "death at the stake". Later, although such supernatural explanations of the disease were discarded and burning at the stake was no longer tolerated, there was still a lack of sympathy for the patient shown in the methods of dealing with the disease. The most extreme forms of restraint were used, very often when there was little, if any, need for restraint. Lunatics—so called, were often heavily manacled and chained down in small, bare, poorly lighted and poorly ventilated cells for years on end. Ingenious machines were devised for bringing an insane person back to his senses. The "tranquilizer", a device for rotating the victim until he was too dizzy to do anything but reel was an example of a product of the ingenuity and ignorance of a doctor of a century ago. Even today there are people who show no more sympathy for the patient or consideration for his rights than to suggest that he be allowed to die through neglect or even be helped on his way. There still seems to be a feeling in the lay mind that the person who has become insane has passed forever beyond the pale of human society with no hope of return to his former walks of life. It is important for us to remember that there are few cases which cannot be improved by proper treatment and that there are many which can, to all intents and purposes, be cured.

The attitude of hopelessness towards mental disease in the past has served to rob many a curable case of his right to treatment and it still operates, along with delay in diagnosis and faulty methods in treatment, against the chances of cure in numerous cases.

So much for the attitude of society in general towards the mentally ill. How must we, who are directly concerned with their care, regard our patients so that they may get from us the optimum of sympathy, discipline and general care which will promote recovery? We must have some idea as to the nature of the diseases affecting our patients. What is mental disease? In general terms it is mal-adjustment, a failure of the individual's adaptability to his environment. Something has cropped up in the patient's life which he, through misfortune of birth or errors in early training has been unable to deal with according to his own ideals or the standards of social convention. A mental breakdown is a relative thing, a matter of balance between the individual's mental equipment and the degree of mental strain to which he is subjected. There is thus no immunity to mental disease. Some cases of mental disorders begin in early adolescence when, because of inherited mental instability or bad mental hygiene in childhood, merely the awakening of the new instinctive demands and new emotional forces associated with the onset of puberty is enough to bring about a breakdown—a mental failure. Others meet their mental Waterloo later in life. Some are susceptible to the action of certain toxins on the brain cells and develop a delirium with an infectious disease, alcohol, etc. Others cannot bear up under the emotional strain of bereavement,

financial reverses, etc. For many the menopause is a critical period. Others weather all the stress and strain of an active, turbulent career only to show a mental decline in old age.

General Pareses (G.P.I.), cases of which may be seen in any General Hospital, is, of course, the result of specific disease, and here the serious organic changes in the brain have deprived the patient of his power of mental adaptation to his surroundings.

Thus, whatever the cause, it may be seen that there has been a struggle to maintain mental equilibrium. The symptoms are the outward expression of the failure to find a satisfactory solution of the mental conflict and a compromise by complete self-suppression, irresponsible self-expression or a wish-fulfilling dissociation of the personality, etc.

Just how all the symptoms arise cannot, in many cases, be satisfactorily explained even by the most erudite psychologists. The mechanism by which the various disorders in consciousness, perception, attention, memory, idea-formation, emotion and volition are produced must remain, in most cases, largely a matter for speculation. What is of more importance than a knowledge of this is the realization that here is a mind diseased, not an individual bent on mischief or crime; here is an unwilling victim of certain pathogenic influences and as such is entitled to pity rather than to censure, ridicule, ostracism, or, worse still, neglect. Above all the patient needs scientific treatment and humane care and whether or not he will receive this will depend largely on the attitude of those responsible for his safety.

The nursing of the so-called "mental case" is looked upon by many as a duty to be avoided rather than gladly assumed. By those whose only knowledge of mental disease is that gained by a short acquaintance with a delirious patient, a fleeting glimpse of a bedraggled figure in the custody of the police, or the perception of strange sights and strange noises in the neighborhood of a mental hospital, the life of a mental nurse is thought to be fraught with considerable danger to life and limb, and even to the nurse's own sanity. A few repulsive impressions become exaggerated in the mind of the observer until the mere thought of a case of mental disease suggests a nightmare of terrors and dangers filling each hour spent with the patient. Such a state of mind is unwarranted; this is fear engendered by ignorance. It is true that there are many cases of mental disease which are dangerous to be at large but many of these cases when removed to hospitals and handled with tact, intelligence and kindliness become tractable and inoffensive. Most cases confined in mental hospitals are agreeable and harmless throughout their illness and require only a tactful consideration of their peculiarities. Among chronic cases which have shown little intellectual deterioration may be found entertaining conversationalists, agreeable companions or skillful workmen. As regards acute

cases which tend to recover, the steady progress shown from day to day, the contrast between the condition at the time of discharge and that at the time of admission provides fully as much cause for gratification as recovery in medical or surgical cases.

It is not to be denied that the care of cases of mental disease is a trying occupation and one that exacts the utmost vigilance, unflagging energy, presence of mind, intelligence and, in fact, all those qualities which we associate with a good nurse. In mental disease, perhaps more than in any other disease, the personal element in the care of the patient is of the highest importance. Those who can come quickly into accord make a hit, as it were with their patients, those who have the ability not only to be of service to the patient but to convey to him the idea that they are with him and not against him are going to be rewarded with success in a greater proportion of cases than those who are very efficient in the technical part of their duties but who are unable to exert any beneficial personal influence over the patient. Indeed there are many people who are capable of doing more harm than good no matter how well-meaning they are, simply because, through ignorance or carelessness, they fail to apply the elements of every-day practical psychology in their dealings with the patient. Let it be admitted that there are many victims of mental disease who are oblivious to all external impressions and whose behaviour seems to be unrelated to any ideas which others may try to convey to them; still there are many of these who respond instinctively to kindness and persuasion much more readily than to command, and there are many more who are highly susceptible to the least gesture or change of expression in those in charge, and seem to know intuitively whether or not a doctor, nurse or orderly is genuinely in sympathy with them.

It may be seen, then, that anyone who aspires to care for the mentally ill needs to be endowed with some of the simple virtues as well as a normal amount of intelligence and good physical health. Patience, equanimity, sympathy, and sincerity perhaps head the list. And yet all these may be misdirected if that rare and indispensable quality known as tact is not used.

Perhaps equally indispensable is a good temper which will remain unruffled by any misconduct on the patient's part; and a sense of humor, not for the appreciation of the ridiculous in the patient's behaviour, but rather for the preservation of a light heart in the face of difficulties.

These are allied to another necessary virtue, courage. The timorous are almost useless in the care of mental cases; fear saps one of whatever other merit one possesses. Fortunately in most cases fear of a patient passes off with a better acquaintance with his peculiarities. There will be times when the patient's words or actions may well inspire fear in the attendant and if not dealt with tactfully and promptly a serious situation may ensue.

There may be many cases whose actions are so objectionable and exasperating to those in attendance that the patience of Job would have been sorely tried,yet even these things the successful mental nurse learns to deal with with no show of temper. An inability to control the temper is fatal to the successful nanagement of many types of cases. A cheerful disposition, a smile or pleasant remark in the face of the verbal abuse or misconduct of a patient, who has perhaps involved you in his or her delusions, is often the most difficult to show, but the ability to do so characterizes the successful mental nurse and indicates the sincerity of effort and the hope of success which marks the proper attitude towards cases of mental disease.

A CHANCE FOR MENTALLY DEFECTIVE CHILDREN

The Special Class, or as it is called in Ontario, the Auxiliary Class, is making its way in Canada. Halifax was one of the first cities to establish such classes. Victoria has had special classes for years and their success is a matter of interest and satisfaction to the community, who recognize the value and importance of the training given to these children, and the consideration and kindness with which they are treated. Vancouver has several teachers engaged in this work. Edmonton, Calgary, Regina, and Winnipeg have all made a beginning and every year the interest in this work grows and the work itself extends. In Ontario, a beginning has been made in Toronto, Ottawa, Hamilton, Brantford, Windsor and Guelph, but progress has not been rapid. A hopeful sign is the conference of Auxiliary Class teachers which was held in 1920 and in 1921 in connection with the Easter Annual meeting of the Ontario Educational Association at Toronto. The good attendance of Auxiliary Class teachers at these two conferences and their energy and enthusiasm as well as their excellent knowledge of Auxiliary Class work speak well for the future of the movement in Ontario.

In Montreal and elsewhere in Quebec, much interest is taken in the subject and with the valuable assistance of the Canadian National Committee on Mental Hygiene there as in other provinces, good work is being done.

To all those aho are interested in the care and training of mentally defective Children, the best field of work is the National Schools. That is the place to discover the "Almosts," to find out and develop their gifts and to give them the best possible training and most suitable opportunities. In connection with our schools too, and especially with the medical inspection of schools, a beginning can be made of that confidential scheme of registration of the mentally-defective which must necessarily be the foundation of any system of adequate and kindly care and control for mentally defective persons,—a control which should protect the mentally defective person and provide for his independent maintenance as far as possible and for his happiness, but which should also protect society from the anti-social acts and tendencies of some mentally defective persons, and above all, should protect posterity from the curse of mental defect.

Editorial—C. M. A. J., June 1921

NOTES AND NEWS

EXTRACT FROM THE SECOND ANNUAL REPORT OF THE NEW YORK STATE COMMISSION FOR MENTAL DEFECTIVES

FIELD AGENTS

The four field agents for the Commission were appointed by the Legislature of 1920. In advocating the creation of these positions, the Commission had two reasons. The first is that any program for the care and provision of mental defectives must consist in providing adequate extra-institutional facilities. The emphasis must in the future be on community rather than on custodial care. The industrial situation during recent years has shown us that there is a place in the labor market for so-called defective labor. An increased demand has been made on account of the economic condition, but there are many instances to prove that the fact remains true that trained defectives can be remuneratively employed and that feeble-minded individuals are and have been working more or less steadily at a variety of jobs for which they received in many cases something more than a living wage. Rome colony experiments have shown the value of the labor of defectives after a period of training, and these two things taken together seem to point the way towards supplying defectives with occupations which render them healthier, happier and more useful to themselves and others.

The records of the various penal and reformatory institutions in the State are uniform in showing two things: (1) A tremendous amount of recidivism, and (2) A large percentage of mental defect. If we are to stop this stream of recidivism at its source, we must diagnose these cases of mental defect if possible before they come up for their first term.

Every defective is not potentially delinquent but with his lack of intellect there is weakness of will and an extreme suggestibility which makes it more difficult for him to keep out of crime. It takes some time for a defective who has been taught good habits to get out of the way of them. The story, told by Dr. Fernald, of the defective lad, paroled from an institution, whose employer's only complaint was that the boy could never be persuaded to stay out of bed after eight o'clock at night, illustrates this point. As we said in our last annual report, the Commission is of the opinion that if every 16-year old graduate from the ungraded classes could be looked after and guided, could be watched and advised as to the best direction for his industrial efforts, if the parents could be instructed as to their responsibilities, a solution of the problem of the defective delinquent would begin to dawn.

When a child leaves the ungraded class he leaves also, in many cases, the last trace of authority and wise jurisdiction. He may go back into a home where his general dullness is recognized as a burden which must be borne by the family. No effort is made to train him for the right sort of a job. The result is a succession of unsuccessful attempts, job after job with its consequent expense to various employers and periods of idleness during which the boy or the girl is largely without supervision and is constantly in great danger of getting into trouble. Eventually he may land in a Children's Court, and if this is a good one, his defect may be recognized and instead of a long series of sentences to homes, reformatories, or penal institutions, he may be given the proper supervision.

It is at the point where the child leaves the ungraded class that the Commission's field agent steps in. At present because of the small staff, the work is concentrated for a training period in New York City. Miss Elizabeth Farrell, supervisor of Ungraded Classes for the New York City Department of Education, has from the first been interested in the Commission's plan for field agents and has given valuable advice and counsel as to the organization of the work. For the present most of the cases which the State agents are investigating are referred by the Department of Ungraded Classes and include discharged cases and those excluded for various reasons. The Department of Ungraded Classes gives the agents a summary of information about the child to date. They retain all their own records adding a note that the child has been referred to the Commission and then close the case. The family is visited by one of the field agents as soon as possible thereafter. All information and complete record of action taken is written upon specially prepared blanks and filed with the data previously received. It is planned to visit each child under the care of the Commission at least once a year. "Closed" cases are considered closed for the year only and will be visited again at the end of that time. Cases which require continued attention are kept among the visitors' current cards and are visited as often as expedient. Cases to be revisited after an interval of several months are filed under the date set for a revisit. In every case visited, an attempt is made to establish friendly relations with the family. Advice is given to the parents in regard to home-care, supervision, companions, etc. Any necessary information is imparted regarding clinics of various sorts. In homes where the child is not receiving proper care or where the parents do not seem able to control or adequately supervise the child, institutional care is suggested and the parents are told how they may secure it. Children looking for employment are given what assistance can be offered. At present this consists mainly in bringing them into contact with the nearest employment agency.

It appears not only that there is ample work for these four field agents, but there is reason to believe that the service they render is already proving acceptable to the individuals and families concerned.

Another reason for requesting the creation of these field agencies is the very great overcrowding of our present institutions and the consequent need for additional bed space. The cost of building has been so prohibitive since the war that the Legislature has not approved continued requests for additional buildings. Field agencies, if they succeed in keeping children out of institutions, will therefore do much to relieve overcrowding, make beds available at the institutions for the custodial low grade type of case and the possibilities for reducing the amount of Juvenile delinquency are not small.

NATIONAL COMMITTEE ON PRISONS AND PRISON LABOR.

STATEMENT OF STANDARDS WHICH SHOULD BE ADOPTED BY THE SEVERAL STATES IN CARING FOR DELINQUENT GIRLS AND WOMEN

A

This Committee stands for the principle that delinquent girls and women should be cared for by women from the time they are arrested until they are returned to the community.

Pursuant to this principle:

I BEFORE CONVICTION

1. The system of employing women on the police force should be extended wherever possible.

2. We approve of the further development of the probation system, and the increased employment of field-workers and preventive agents.

3. We approve of the establishment of detention houses for girls and women, officered by women, and providing for proper classification and separation of different types of offenders.

II AFTER CONVICTION

We recommend:

1. The establishment by the state of a central clearing house, to which convicted girls and women should be sent for scientific study,

including physical and mental examination, and study of family history, home surroundings and previous experience in life; and from which such girls and women shall be returned to the court for sentence with recommendations as to their distribution in accordance with the findings of these examinations.

2. That for all juvenile delinquents who are mentally capable, the state provide a training school, offering academic, vocational and industrial courses adapted to the needs of the various grades and as a preparation for self-support.

3. That for all mentally capable women, regardless of age or type of offense, the state provide a reformatory.

4. That separate provision be made by the state for delinquent girls and women who are mentally or otherwise incapable of profiting by the training of the training school or reformatory.

5. That all those committed to these institutions be under an indeterminate sentence.

III When Returned to the Community

We recommend that the parole system be greatly extended and improved as being the chief preventive of recurrent delinquency, and that the number of parole officers be increased sufficiently to secure the success of the system.

B

This Committee recommends the following standards for these State training schools and reformatories:

1. That they be controlled by a small board composed of both men and women, preferably five in number and not to exceed seven.

2. That the superintendents be women.

3. That they be located in the country, accessible to a city or town, but sufficiently removed to provide land for the expansion of a growing institution; and that they be developed on a cottage and community plan, providing for outdoor work and recreation.

4. That the construction at these institutions of small, inexpensively built cottages with single rooms, approximating as nearly as possible a home unit, be encouraged.

5. That the medical programme in these institutions be standardized; and to that end, each institution employ a woman physician, resident if possible; that the methods of diagnosis and treatment of

venereal disease prescribed by the recognized current authorities be employed; and that the best known methods of diagnosis and treatment be adopted in the case of all other diseases and defects.

6. That some form of student government or other civic expression be established in these institutions.

C

1. This Committee will endorse requests made by heads of institutions for the care and training of delinquent girls and women, for appropriations necessary to maintain staffs adequate in number and type; and also the efforts made by such superintendents to secure (1) A fair standard of hours of work for employees and (2) A fair scale of salaries, on the basis of equal pay with men for equal work, the standard to be decided by comparison with the hours of labor and salaries in the community.

2. At a conference called by this Committee in Washington, D.C., December 3, 1920, it was resolved to endeavor to impress upon the women's organizations of the country the fact that the delinquent girl or woman, being a community product, is a community problem; and to urge that they co-operate with heads of institutions and others engaged in preventive work in meeting this joint obligation.

3. To this end, this Committee empowers its chairman to present this report on standards to the Social and Industrial Conditions Division of the Public Welfare Department of the General Federation of Women's Clubs with the request that it be given circulation throughout their membership.

DECIDED DROP IN INSANITY CASES FROM ALCOHOL AND DRUGS

The favorable effect of prohibition so far as the insanity rate in New York State is concerned is indicated by official figures, which form the basis of an article by Dr. Horatio M. Pollock, Statistician of the State Hospital Commission in *Mental Hygiene* on "The Decline of Alcohol and Drugs as Causes of Mental Disease."

"The decline in the rate of first admissions during the past year is very significant" writes Dr. Pollock. "From it we catch a gleam of hope that the heavy burden of insanity now resting on the people of the state may gradually be made lighter."

The figures given show that in 1909, 10.8% of all first admissions to the state hospitals in this state were due to the excessive use of alcohol. For the year ending June 30, 1917, practically covering the year im-

mediately prior to our entrance into the war, 8.6% of first admissions were of the alcoholic type. In 1918, under the wartime ban on strong drink, the alcoholic first admissions dropped to 5.2%; in 1919 to 4.0%; and in 1920 under constitutional prohibition, to the low level of 1.9%. It must be borne in mind also that this 1920 low record is for the year ending June 30, 1920, and that during the fiscal year the federal prohibition amendment was in force for only 5½ months. Of the 122 new cases of alcoholic insanity admitted to the civil state hospitals during this fiscal year, 75 reached the hospitals before January 16, 1920, and only 47 after that date up to the time Dr. Pollock wrote the article.

Moreover, as Dr. Pollock points out, nearly all forms of alcoholic insanity result from long continued and excessive use of alcohol and it would therefore be expected that some cases would develop after the public sale of intoxicating liquors ceased. The marked reduction already noted would indicate, however, that excessive drinking has been much lessened.

DRUG CASES LESS, NOT MORE

An interesting side light is that the fear of many people that the abolition of alcohol as a beverage would lead to increased indulgence in the use of narcotic drugs has not been realized. During the past year the drug cases among first admissions have actually been less than in the year previous. In 1920, drug insanities represented only 0.2% of all first admissions.

How much effect will the decrease in alcoholic insanities have in lowering the general incidence of mental disease? Dr. Pollock gives in his article a table showing the rate per 100,000 of general population of all first admissions to the civil state hospitals in New York State from 1909 to 1920 inclusive. From 1909 to 1917 there was a steady trend of increase in this rate, reaching the conspicuously high figure of 69.0 per 100,000 in 1917, due, in part, no doubt, to the great emotional disturbances accompanying the entrance of this country into the war. Since 1917, coincident with the decrease in the alcoholic rate, this general insanity rate has also steadily declined to 67.3 in 1918, 66.3 in 1919 and in 1920 to 63.3, the lowest general rate of increase in this state since the year 1912.

The Province of Manitoba has embarked on an extensive building programme in connection with the care of the Feeble-Minded and Insane. During the past year the first unit of the school for the feeble-minded was commenced, a colony building was completed, a nurses' home and psychopathic unit commenced at the Hospital for Mental Diseases,

Brandon, and a new laundry building supplied at Selkirk. During the present year work will be completed on the two units at Brandon, a psychopathic unit completed at Selkirk and a second building added to the school for the feeble-minded at Portage la Prairie.

A FRENCH LEAGUE OF MENTAL HYGIENE

In April, 1920, the French Minister of Hygiene and Prevention instituted a Committee of Mental Hygiene. This has now been supplemented by an unofficial League of Mental Prophylaxis and Hygiene (Ligue de prophylaxie et d'hygiene mentale) which will be devoted to a study of all questions relating to mental health as it concerns the individual and communities. Indeed, the activities of the League as outlined will cover much wider ground than our own National Committee for Mental Hygiene. It proposes to open dispensaries for rational and harmless psychopaths, to influence legislation, to direct and assist research and to institute active propaganda among all classes.

The League desires affiliation and co-operation with similar organizations in other countries and will welcome inquiries and suggestions.

The President is Dr. Antheaume, a distinguished psychiatrist and publicist, and the secretary is Dr. Genil-Perrin, 99 Avenue de la Bourdonnais, Paris, France.

DUTCH SOCIETY OF MENTAL HYGIÈNE

Headed by Dr. Ariens Kappers and Dr. B. Brouwer, a society for the scientific study and promotion of nervous and mental therapeutics has been formed in Holland. It includes all the professors in neuropathology and psychiatry in Holland and several pharmacologists. The society is sustained by subscriptions. It publishes a periodical called "Neurotherapeutics," for which contributions are accepted in all modern languages. Contributors are paid $13 for each sixteen pages of printed matter. The society also invites foreign physicians to deliver lectures on their work, Professor Petren of Sweden and Prof. F. Plaut of Munich being among recent lecturers. It is expected that Levaditi will lecture to the society in October. In an announcement, physicians are offered membership for the annual fee of 10 florins, life membership for 250 florins or associate membership for 5 florins yearly or a single sum of 100 florins. The society may be addressed through the secretary, Dr. B. Brouwer, Konninginneweg 170, Amsterdam.

FIRST SESSION OF THE FRENCH LEAGUE OF MENTAL HYGIENE

The first session of the French League of Mental Prophylaxis and Hygiene was held in Paris, June 1. Addresses were delivered by the president, Dr. Toulouse, and by Justin Godart who defended the right of the insane to support by the government; by Prof. Jean Lepine, who requested the creation of dispensaries for psychopathic patients, and by Dr. F. Williams, director in France of the Rockefeller Foundation. Requests for admittance to membership in this organization should be addressed to the Secretary, Dr. Genil-Perrin, Avenue de 1a Bourdonnais 99, Paris, 7th arrt.

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